'Achaemenid' and 'Achaemenid-inspired' Goldware and Silverware, Jewellery and Arms and their Imitations to the North of the Achaemenid Empire*

Mikhail Treister

1. Introduction

Some recent studies devoted to the history of the Kingdom of Bosporus advance a thesis about the political independence of the early Bosporan Kingdom from the Achaemenid Empire, primarily based on the passage by Diodoros about the rule of Archaenactidae, placed in the chapter devoted to events in Asia.¹

Yet it has been argued that the passage in Diodoros about the events of 438 in Cimmerian Bosporus gives no direct proof of any prior independence from the Achaemenids.² A range of material has been presented as indirect evidence for contacts between the Achaemenid Empire and the north Pontic area and the concomitant influence on the historical development of that region:³ the Achaemenid seals found in Bosporus,⁴ the impression of an Achaemenid seal on a clay weight from Olbia,⁵ the supposed connection between the Bosporan and Persian weight systems, the parallels between some coin emblems of the Bosporus and Olbia and Achaemenid symbols,⁶ not to mention the distribution of Iranian names in the onomasticon of Olbia and the Bosporus.⁷

This paper dwells on the finds of 'Achaemenid' silverware and goldware, arms and jewellery in the vast areas outside the northern frontier of the Achaemenid Empire. I will characterize the objects which may be determined as "Achaemenid" or "Achaemenid-inspired" or imitations of objects of the first two categories, and dwell on the problems of their dating and the possibility of their attribution to certain local centres within the the wider so-called "Achaemenid international style".8

2. Analysis of objects from the north Pontic area

2.1. A rhyton from the Seven Brothers barrow no. 4

Among the five rhyta found in the Seven Brothers barrows, 9 from barrow no. 4 came a silver rhyton with an ibex protome with a horizontally-fluted horn and

incised decoration (Fig. 1).¹⁰ The rhyton is traditionally considered to be the product of an Achaemenid workshop located in Iran and is dated to the fifth century BC. Oscar Muscarella¹¹ compares it with four other rhyta, including that with a bull protome from Borovo in Thrace,¹² a rhyton on the antiquities market,¹³ that to his mind seems to be a mate to the Seven Brothers rhyton, another one without provenance in the form of the full body of a ram and a vessel terminating in the forepart of a ram, supposedly from Kappadokia, once in the Norbert Schimmel Collection and now in the Metropolitan Museum of Art.¹⁴ Muscarella suggests that these vessels were manufactured in the same or a closely-connected workshop, although it is difficult to define a location.¹⁵ Another rhyton of this group, 18.7cm high, was sold in 2001 at Sotheby's in New York.¹⁶

The protome of an ibex with outstretched front legs and with a spout for pouring wine, of unknown origin, is held in the Reza Abbasi Museum in Tehran.¹⁷ Figures of ibexes were also used as vessel handles, for instance on a silver amphora with horizontal fluting from Hamadan¹⁸ and in the case of the sculpted handles with lower attachments in the form of Silen masks in Berlin (allegedly from Erzincan)¹⁹ and Paris.²⁰ A gold terminal of a bracelet or torque said to come from the Sardis area, once in Berlin, is also comparable in style.²¹

The treatment of the lotus-and-palmette chain, including the horizontal ties at the base of the palmettes as well as the use of the guilloche pattern, puts the decoration of the upper part of the horn of the Seven Brothers rhyton (Fig. 2) close to that of the silver-gilt amphora-rhyton with sculpted handles from Kukova Mogila near Duvanli in Thrace, dated to the third quarter of the fifth century BC;²² the above-mentioned rhyton supposedly from Kappadokia, now in New York;²³ a silver rhyton in the form of the head of an ibex from Siberia, kept in the State Hermitage Museum;²⁴ as well as the skyphos from the former collection of Hagop Kevorkian, now in the Metropolitan Museum of Art.²⁵ The shape of the latter finds its closest parallel in the bronze vessel from tomb no. 723 in Sardis, dated to the seventh to sixth century BC,26 although there are variations in the details of the treatment of the palmettes and lotus flowers and the latter are connected with arcs composed not of parallel lines but of dots. One should also mention a similar lotus-and-palmette chain on a silver flat-bottomed horizontally-fluted beaker in the British Museum,²⁷ which belongs to a class of vessels shown in the hands of the members of Delegation XII, the Ionians, on the relief of the east side of the Apadana in Persepolis,²⁸ and not only Delegation XV, allegedly the Arachosians, the latter mentioned by M. Vickers,²⁹ as well as represented by the real finds in burial no. 6/1961 in Vani³⁰ and allegedly from Erzerum.³¹

These ornamental friezes differ in style from the lotus-and-palmette chain without guilloche pattern decorating the lip of the gold rhyton with lion protome from Hamadan, dated to the first half of the fifth century BC,³² or the frieze of palmettes and lotus flowers on the rhyton with the protome of a winged griffin from Erzincan in eastern Anatolia.³³ However, a similar deco-

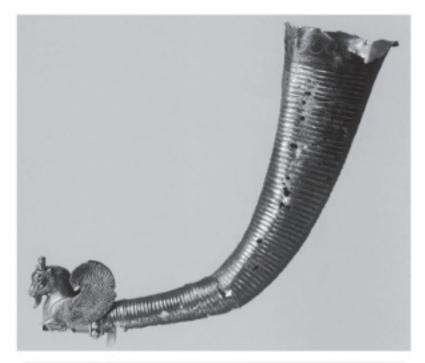




Fig. 1. A silver rhyton from the Seven Brothers barrow no. 4. State Hermitage, inv. SBr IV.3 (photo after Cat. St Petersburg 2004, no. 4).

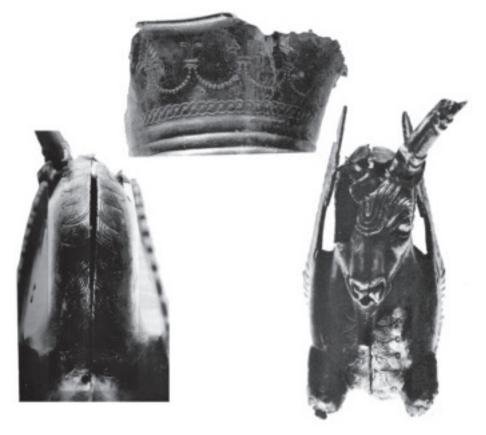


Fig. 2. A silver rhyton from the Seven Brothers barrow no. 4. State Hermitage, inv. SBr IV.3 Details (photo after Vlasova 2001a, 21, fig. 1, 23, fig. 3).

rative pattern, the lotus-and-palmette chain, occurs on a wall decoration in glazed bricks from Susa,³⁴ as well as on a silver-gilt bowl from the so-called second part of the Oxus Treasure³⁵ and some other examples without provenance, such as a silver hemispherical bowl with gold appliqués in the Miho Museum.³⁶

The vessel from Kukova Mogila, given its characteristic shape, belongs to a class of vessels represented both by actual finds and depicted on the reliefs from Persepolis.³⁷ The amphora-rhyton from Kukova Mogila is generally recognized as being executed in a purely Achaemenid style.³⁸ Another, once in a private collection in Paris, originates supposedly from the region between Sinop and Trabzon.³⁹ A third, in the G. Ortiz Collection in Geneva comes from a treasure found in about 1970 in the area of Sinop.⁴⁰ It is worth noting that vessels of a similar shape are shown in the hands of the members of Delegation VI, the Lydians,⁴¹ and Delegation III, the Armenians.⁴² According to B. Filow,⁴³ the depiction of similar vessels in the hands of members of different

delegations points to the fact that they were not regional types, but rather belonged to the type adopted by the Achaemenid court, and they could have been manufactured in workshops situated on the coasts of Asia Minor.⁴⁴ Also, the analysis of the shape and the decoration of amphora-rhyta conducted by M. Pfrommer, gave him grounds to suggest that both the vessel from Kukova Mogila and those in the J. Paul Getty Museum were the products of a workshop in Asia Minor, probably located at the court of one of the satraps.⁴⁵

If the lotus-and-palmette chain on the Seven Brothers rhyton cannot provide decisive confirmation about the place of its manufacture, the treatment of the locks of hair on the neck and manes of the ibex protome (Fig. 2) can offer assistance. Their closest parallels appear on the images of double-ibex protomes over winged sun disks on a silver phiale from Usak, eastern Lydia, 46 and on a similar bronze phiale from Ünye, 47 both now in Ankara, as well as on the figures of animals on the handles of the above-mentioned amphora-rhyta from Kukova Mogila and from the treasure found near Sinop, now in the G. Ortiz Collection. 48 Among the Achaemenid-style rhyta, the closest parallel is on the damaged silver rhyton with calf protome, a 1965 chance find from an early Sarmatian barrow near the village of Dolinnoe in the southern Ural area. 49

Thus, it seems that we can tentatively identify the rhyton from the Seven Brothers barrow no. 4 (Figs. 1, 2) as a product of this Asia Minor workshop and suggest a date for its manufacture within the first half, most probably the second quarter, of the fifth century BC. Such a date corresponds well with the dating of the burial in the fourth barrow to ca. 450-425 BC.⁵⁰

I therefore cannot agree with Muscarella that all the rhyta which he mentions as parallels to the Seven Brothers rhyton may have been manufactured in one and the same workshop. Not only does the much larger scale distinguish the Seven Brothers rhyton from the objects cited above; also, its manner of construction is idiosyncratic. A muff, decorated with filigree and large hemispherical umbos, covers the junction of terminal and horn; the technique is paralleled on no certainly Achaemenid rhyton.

2.2. A sword from the Chertomlyk barrow

A sword found in the Chertomlyk barrow has a hilt with gold overlay, decorated in the Achaemenid style,⁵¹ which differs from the gold overlay of the scabbard,⁵² executed in the so-called Graeco-Scythian style and probably representing either scenes of the Trojan War or an episode from the battle between Macedonians and Persians (Fig. 3).⁵³ Besides this discrepancy, it is stated that the sword has a blade untypical for Achaemenid swords: the upper part has a row of rectangular openings along the axis. E.V. Chernenko mentions that such open-worked blades are characteristic solely of swords originating from Scythian barrows of the fourth century BC.⁵⁴ Analysis of the decoration of the hilt of the Chertomlyk sword led A.Ju. Alekseev and E.V. Chernenko too date it to the fifth century, or even to the late sixth to early fifth century BC,

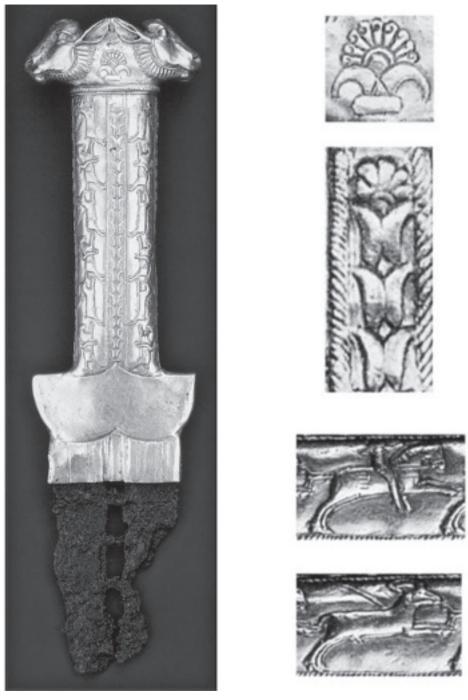


Fig. 3. A sword from the Chertomlyk barrow and the main elements of its decoration. State Hermitage, inv. Dn 1863 1/448 (photo after Cat. New York 2000, no. 163).

and to identify it as an Achaemenid product.⁵⁵ V.G. Lukonin dated it to the fifth century BC, suggesting that the hilt overlay was hammered by a Median toreut.⁵⁶ The suggestion⁵⁷ that an originally Achaemenid sword was reworked in Scythia in the fourth century BC is indirectly proved by the technological observations made by R.S. Minasyan. Minasyan has, however, stated that "the final proof concerning the secondary use of the sword's hilt may be reached only after study of the inner surface, up to now unavailable for examination".⁵⁸

Several discrete elements of the decoration of the hilt of the Chertomlyk sword deserve fuller discussion: (1) a finial in the form of two antithetic bull heads; (2) a palmette, decorating the finial; (3) a palm-tree pattern, decorating the vertical axis of the hilt; (4) the figures of mounted archers galloping to the left and right and the ibexes wounded with arrows decorating the side friezes of the hilt.

The motif of double-animal protomes, including those of bulls, was wide-spread in both Achaemenid sculpture and decorative art. An important parallel with the finial of the hilt of the Chertomlyk sword is the use of a similarly shaped palmette on a double-bull column capital excavated by W.K. Loftus in 1850-1852 from the palace of Dareios at Susa.⁵⁹ That this motif was used for the decoration of the pommels of Achaemenid swords is testified not only by the gold dagger said to be from Hamadan decorated with double lion heads,⁶⁰ but also by an ivory pommel with double rams' heads in the Louvre, the provenance of which is unknown.⁶¹

The stylized palm tree, very similar to the central band, decorating the hilt, was used in the decoration of the western façade of the west staircase of the palace of Dareios (tachara) at Persepolis; the evidence of the inscription suggests that the reliefs were probably added in the reign of Artaxerxes III (359-338 BC).⁶² It also appears on a stone relief showing a winged sphinx from Persepolis, originally set up on a façade of palace G, constructed by Artaxerxes III, and later transferred to the north staircase of palace H.⁶³

Others have already mentioned the parallels to the representations of mounted archers and ibexes,⁶⁴ including that with images of riders in a hunting scene on the umbo from the Oxus Treasure, which is usually dated within the fifth to fourth centuries BC.⁶⁵

On the whole, analysis of the parallels to the decorative elements does not allow a precise dating for the sword. The parallels range from the last decades of the sixth to the mid-fourth century BC. The shape of the cross-guard, characteristic of *akinakai* of the seventh to sixth and early fifth centuries, ⁶⁶ speaks rather for an early date. At the same time, the central frieze of the hilt with the image of the palm tree finds rather similar parallels on the reliefs from Persepolis dating to the rule of Artaxerxes III, i.e. to the mid-fourth century BC.

2.3. Imitations of "Achaemenid" silverware. A silver rhyton from Kul'-Oba A silver rhyton with horizontal fluting and with a protome of a recumbent ram (Fig. 4) was found in the Kul'-Oba barrow near Kerch in eastern Crimea.⁶⁷



Fig. 4. A silver rhyton from Kul'-Oba. State Hermitage, inv. KO 104 (photo after Cat. New York 2000, no. 147).

Although its shape and the horizontal fluting of the horn correspond to those of Achaemenid rhyta, the treatment of the protome, decorated with circles with dots inside, is not characteristic of Achaemenid rhyta. Rather, it finds parallels on items of the Graeco-Scythian style,⁶⁸ for instance, on a gold overlay with images of two rams from the Scythian barrow of the mid-fourth century BC in Gajmanova Mogila.⁶⁹ Thus, the rhyton from Kul'-Oba should be considered as a local Bosporan imitation of rhyta of Achaemenid type.

2.4. Objects of the Achaemenid circle

Deep Achaemenid bowls from the Solokha and Zhirnyj barrows. Phiale from the tumulus on Mount Zelenskaja

A.Yu. Alekseev attributes to the items made in the so-called Graeco-Achaemenid tradition a set of horse bridle found in an individual horse grave

of the Alexandropol barrow, including a frontlet in the form of a sculpted horse head with a characteristic vertical bun on the head, untypical for Scythian horses, but having parallels in items of Achaemenid toreutic.70 Actually, Alekseev does not provide examples of such treatment of horse hair in metalwork. Except for similar buns on the heads of winged horses, for example the handles of a silver amphora-rhyton of unknown provenance, now in Berlin, 71 the closest parallel of which I know is the rendering of the horse hair on the gold earrings⁷² from the so-called Akhalgori Treasure found in the late 19th century in the territory of modern southern Ossetia,73 but this is now considered to date to the second half of the fourth to the early third century BC.74 At the same time, stylistically, the treatment of the horse heads on the earrings from Akhalgori, being most probably an example of Colchian workmanship in an Achaemenidizing style, have nothing to do with the frontlet from the Alexandropol barrow. Similar treatment of horse hair is also seen on the earrings with pendants from Vani burial no. 6/1961; the earrings are examples of Colchian goldwork of the fifth to the first half of the fourth century BC.75 However, the attribution seems to be arguable, especially given the parallels both in form and decoration with gold and silver frontlets from the Thracian tumuli of the second half of the fourth century BC.76

We can discusss with much more certitude the bronze phialae from the central burial of the Solokha barrow⁷⁷ and from the destroyed burial of the Zhirnyj ("Fat")⁷⁸ barrow near Stanitsa Temizhbekovskaja in the Kuban valley as examples of metalware of the Achaemenid circle: they belong to the group of the so-called deep Achaemenid bowls which originate primarily from Egypt, Iran, Syria and Cyprus.⁷⁹ On the basis of proportions, Pfrommer dates the bowl from Solokha (Fig. 5) as early as the first half of the fifth century BC,⁸⁰ which seems not to be substantially grounded. In its shape and proportions it is rather similar to a silver bowl from Gezer.⁸¹ The bowl from Zhirnyj barrow (Fig. 6), which M. Pfrommer does not discuss, finds closest parallels among the silver bowls from Raduvene in Thrace.⁸² Another close parallel is a bronze bowl found in the Lycian necropolis of Karaçalli near Antalya, dated to the first quarter of the fourth century BC.⁸³ Its shape and proportions may also be compared with those of the silver bowls from Erzincan, although the latter are much larger in dimension.⁸⁴

A silver phiale from tomb no. 3 in the barrow on Mount Zelenskaja on the Taman peninsula (Fig. 7), with flaring offset rim and decorated in the lower round-bottomed part with numerous petals, 85 belongs to the type "Flache Schale mit gerade verlaufender Wandung und ausladendem Rand" (after Abka'i-Khavari). It finds parallels in tomb B at Derveni in Macedonia, 86 in the Naip tumulus in southeastern Thrace 7, in Prusias in Bithynia (reportedly) and in the burial on the acropolis of Susa. 49 A similar mid-fourth century BC phiale comes from Acarnania. 40 All these phialae are decorated with pointed leaves, not with petals, thus, they are often designated as "leaf phiale", a type derived from Achaemenid fluted phialae of the fifth century and known in



Fig. 5. A bronze bowl from the central burial of Solokha. State Hermitage, inv. Dn 1912 1/54 (photo after Mantsevich 1987, 39, no. 12).

Greece by the early fourth century.⁹¹ M. Pfrommer⁹² maintains that the phiale from the Zelenskoi tumulus is executed in the late Achaemenid tradition and he compares it with the pre-Ptolemaic phiale from the Tuch el-Karamus Treasure. Indeed, the shape of the Tuch el-Karamus phiale⁹³ is similar to that of the Zelenskoi phiale. Among the phialae from Tuch el-Karamus, a vessel with similar petalled decoration should be mentioned.⁹⁴ Petalled decoration is seen on a bronze phiale from Ur, with a very similar profile,⁹⁵ on a silver phiale from the Oxus Treasure⁹⁶ and more often on some silver bowls of similar shape from Thrace.⁹⁷

3. Achaemenid objects and earlier Near Eastern finds in the north Pontic area

Thus, the six finds discussed above are the only examples of: (a) toreutics of Achaemenid style (the handle of the Chertomlyk sword); (b) "Achaemenid-inspired" objects (the rhyton from the Seven Brothers barrow no. 4, the bowls from the Solokha, Zhirnyj and Zelenskoj barrows); and (c) imitations of the Achaemenid style (the rhyton from Kul'-Oba) found in the north Pontic area. Their volume is much less than the number of Near Eastern toreutic items of the eighth to seventh century BC found in the Kelermes barrows in the Kuban area. The Near Eastern imports are primarily details of furniture and utensils, which were most probably used by the Scythians in a way other



Fig. 6. A bronze bowl from Zhirnyj barrow near Stanitsa Temizhbekovskaja. Krasnodar Museum (photo after Anfimov 1966, 22, fig. 5).

than originally intended. The majority of the other toreutic items found in the Kelermes barrows, arms (a sword, a ceremonial axe, decorative plates of shields and quivers), vessels (a bowl and rhyta) and a mirror, were rather items of Urartian, Iranian and Asia Minor origin made for Scythian customers⁹⁸ in the second to third quarters of the seventh century BC.⁹⁹ According to L.K. Galanina, several such workshops could have existed in the Near East.¹⁰⁰ However, repeated stylistic elements on the items, executed in various artistic traditions,¹⁰¹ rather speak in favour of a single workshop, in which craftsmen of various origins could have worked together. Perhaps, this "Scythian workshop", uniting toreuts from Urartu, Iran, Lydia and Ionia, could have operated at the headquarters of the Scythian kings during their raids in the Near East, although the suggestion of the possible location of this workshop at the Scythian headquarters in the Kuban area has also been raised.¹⁰²

In addition, fragmentary silver rhyta of the late seventh to early sixth century BC, most probably of the pre-Achaemenid period, were found in the early Scythian barrows in the Don area (Krivorozh'e)¹⁰³ and the forest-steppe of Ukraine (Ljubotin barrow no. 2).¹⁰⁴ They originally looked similar to the rhyta from Marash in Syria¹⁰⁵ and Filippovka in southern Ural.¹⁰⁶



Fig. 7. A silver phiale from the barrow on Mount Zelenskaja, tomb no. 3. State Hermitage, inv. Zel. 36 (photo Institute of History of Material Culture, St Petersburg, photoarchive, negative no. 15204).

4. Patterns of distribution of Achaemenid finds

4.1. The Black Sea area and Caucasus

Another question concerns the various patterns of distribution of Achaemenid finds. The rhyton with a winged-ibex protome, which may be attributed to an Asia Minor workshop, worked in the Achaemenid style in the second quarter of the fifth century BC, is the only item executed in this style found in the rich burial of the Seven Brothers barrow no. 4. The barrow is dated to the middle to the third quarter of the fifth century, and yielded both toreutic items of supposedly Attic workmanship, a silver cup with gilded engraved images (Nike sitting on a stool with carved legs)¹⁰⁷ dated to ca. 470 BC, and items of local Bosporan workshops, including other rhyta.¹⁰⁸ Similar toreutic items worked in the Achaemenid style are represented, for instance, by the above-mentioned amphora-rhyton from Kukova Mogila in Thrace,¹⁰⁹ whose burial¹¹⁰ is more or less synchronous to that of the Seven Brothers barrow no. 4, or the rhyton with a bull protome¹¹¹ from the so-called Borovo Treasure of the first half of the fourth century BC.¹¹²

It is worth noting that the small quantity of toreutic items in the Achaemenid style from the north Pontic area contrasts to the rather numerous distribution of seals, both cylinder and scaraboid, of Graeco-Persian type. They originate, primarily, from the necropoleis of the Bosporan Kingdom, first of all Pantikapaion, with separate finds in one of the Seven Brothers barrows and from Chersonesos (see Appendix 1) (Fig. 8). Remarkable also is the fact that such seals are practically unknown in the Scythian barrows of the Dnieper basin, 113 where, for instance in Chertomlyk, there are known finds of gold finger bezelrings with engraved images of east Greek type. 114 In the north Pontic area, four of 14 seals originating from reliable contexts are cylinder seals, which were used in the Achaemenid Empire from the reign of Dareios

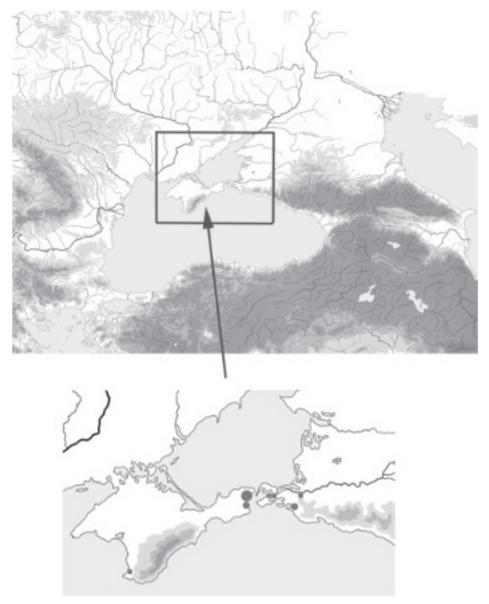


Fig. 8. The distribution of Graeco-Persian seals of the fifth to fourth century BC in the Crimea and the Kuban area (map M. Treister).

I for sealing royal documents.¹¹⁵ At the same time, some of the seals found in the area of the Bosporan Kingdom were most probably cut in western Anatolia, primarily in Lydia, where numerous examples of Achaemenid-type seals have been found. Noteworthy is the comparison of the motif of a pair of confronting winged griffins on a scaraboid with a Lydian inscription from

Pantikapaion¹¹⁶ with the motif of a pyramidal stamp seal from Ikiztepe¹¹⁷. Also, the loops of the scarabs from Nymphaion and Seven Brothers barrow no.3 find exact prototypes among the loops of the scaraboids from Ikiztepe¹¹⁸ and from Sardis¹¹⁹ in Lydia.

On the other hand, neither in Scythia nor in the Cimmerian Bosporus was jewellery of the Achaemenid style found. This situation contrasts sharply with numerous finds, including bracelets of various types¹²⁰ and a pectoral, ¹²¹ found in burial no.6 in Vani, Colchis. Also in Colchis (Mtsidziri), an "Achaemenidinspired" silver rhyton with a protome of a syncretic deity was found. 122 The finds of "Achaemenid-inspired" jewellery and vessels of Achaemenid style occur not only from Colchis, which paid tribute to the Achaemenid Empire and was a buffer state adjoining its border, 123 but also in northeastern Georgia, most certainly outside the border of the Achaemenid Empire (the so-called Akhalgori Treasury, presumably an inventory of a burial dated to the late fourth to early third century BC124 and the so-called Kazbegi Treasure).125 It is also remarkable that in the territory of modern Georgia, of which only a certain part allegedly belonged to the Achaemenid satrapy, only six Achaemenid seals, four of which originated from later contexts of the first centuries AD, have been found. 126 At the same time, Georgian finds of jewellery and vessels made of precious metals in the Achaemenid style, both in terms of quantity and variety of types, exceed those from Armenia, which was certainly an Achaemenid satrapy, and which has yielded silver Achaemenid and Achaemenid-style rhyta in the Erebuni Treasure¹²⁷ and also separate finds of jewellery, such as a pectoral from Armavir. 128

4.2. The south Ural region

The distribution of Achaemenid and Achaemenid-style silver, silver-gilt and gold vessels, including various shapes, such as rhyta, double-handled jugs, cups and phialae, exemplifies an absolutely different pattern in the rather compact area of the south Ural. All ten finds originate from early Sarmatian burials of the fourth century BC, including those in barrows no. 1 and no. 4 of Filippovka, ¹²⁹ barrows no. 1 and B in Prokhorovka, ¹³⁰ Dolinnoe¹³¹ and Orsk. ¹³²

4.2.1. Vessels made of precious metals

4.2.1.1. Vessels from Filippovka

A gold goblet with double-layered walls and double handles shaped as ibexes (Fig. 9) from cache no. 2 in barrow no. 1 is unique. 133 However, a stylistically similar treatment of animal heads may be seen on a silver inscribed rhyton, the lower part of which is shaped in the form of three ibex heads. The rhyton, 134 which is kept in the National Museum, Tehran, originates from the so-called Western Cave Treasure (Kalmakareh cave in Luristan), which was looted between 1989 and 1992. 135 Given the Neo-Elamite and Neo-Assyrian cuneiform inscriptions on many of the vessels, the treasure may be dated to the late seventh or to the early sixth century BC. It may be supposed, thus,

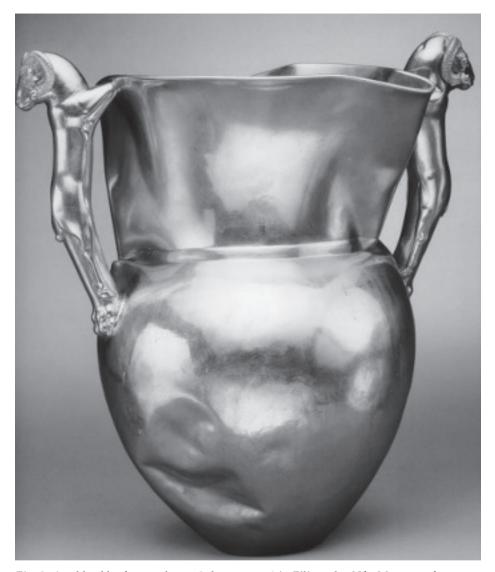


Fig. 9. A gold goblet from cache no. 2, barrow no. 1 in Filippovka. Ufa, Museum of Archaeology and Ethnography of the Centre of Ethnological Studies, Ufa Scientific Centre of the Russian Academy of Sciences, inv. 831/384 (photo after Cat. New York 2000, no. 93).

that this is the earliest of the vessels found in Filippovka – it may be tentatively dated to the late sixth to the first half of the fifth century BC – and can be attributed as an item of an Iranian (Luristan?) workshop.

A silver amphora-rhyton (Fig. 10) from burial no. 4 of barrow no. 4/2006¹³⁶ belongs to the same class of vessels as a piece from Kukova Mogila, which has already been discussed briefly above.¹³⁷ The decoration of the vessel's



Fig. 10. A silver amphora from burial no. 4, barrow no. 4 in Filippovka. Orenburg, Local Lore Museum, inv. 19064 (photo after Jablonskij & Meshcherjakov 2007, col. pl. 1).

body with only vertical fluting (without lotus-palmette chain) finds parallels on vessels of unknown origin in the Pomerance Collection¹³⁸ and the Berlin Museum.¹³⁹ The closest parallel to the handle showing an ibex occurs on a vessel in the Ortiz Collection.¹⁴⁰ A similar silver handle showing a bull figure with its head turned back (but without a spout) originates from the treasure of a toreut found in Babylon and dates to the middle of the first quarter of the fourth century BC.¹⁴¹ Given the distribution of such vessels, both actual artefacts and depictions, ¹⁴² there are good reasons to date the amphora-rhyton from Filippovka from the mid-fifth to the early fourth century BC and to consider it as derived from an Asia Minor workshop.

The closest parallel in shape to the silver-gilt tulip-shaped rhyton (Fig. 11) from cache no. 2 in barrow no. 1¹⁴³ is a silver goblet, with a lost, supposedly conical basin, from treasure no. 2 found in the early 20th century in Panderma in the western Asia Minor. The body of this cup is horizontally fluted, the incised frieze on the upper part of the body is composed of alternate circles and double lotus flowers. The shape and decoration of the goblet from Panderma give reason to consider it as inspired by the lydion shape and to date it tentatively to ca. 400 BC, considering it as an item of a Lydian workshop. ¹⁴⁴



Fig. 11. A silver-gilt rhyton from cache no. 2, barrow no. 1 in Filippovka. Ufa, Museum of Archaeology and Ethnography of the Centre of Ethnological Studies, Ufa Scientific Centre of the Russian Academy of Sciences, inv. 831/388 (photo after Cat. New York 2000, no. 95).

A rosette composed of lily petals (*nelumbo*) is a characteristic element of the fifth to fourth century BC silver goblets distributed primarily in Egypt, but known also outside of its borders, for instance in Asia Minor, ¹⁴⁵ Macedonia and Thrace. ¹⁴⁶ The feature of gilt elements alternating with similar ones in silver colour is characteristic of items of toreutics of the first half of the fourth century BC, for example the phiale said to have been found in Akarnania ¹⁴⁷ and those from the Rogozen Treasure, ¹⁴⁸ as well as the above-mentioned jugs from the Rogozen Treasure. ¹⁴⁹ Thus, the vessel from Filippovka may be most probably dated within the period the late fifth/early fourth century BC to the first half of the fourth century BC and considered as the product of a workshop located in western Asia Minor or Thrace.

A silver rhyton with a bull protome (Fig. 12) from cache no. 2 in barrow no. 1^{150} finds its nearest parallel in the above-mentioned find from Borovo¹⁵¹ and is probably an item manufactured in the first half of the fourth century BC in the workshop of the quarters of the king of the Odryssian dynasty.

A vessel with a flat-bottom, egg-shaped body, decorated with concentric incised lines, encrusted with gold wire, with a short neck widening towards the out-turning lip (Fig. 13) from cache no. 1 of barrow no. 1^{152} most probably imitates the form of the lydion, a silver vessel of that shape 153 which is known also in Lydian pottery 154 originating from looters' excavations of the Ikiztepe barrow in eastern Lydia.

The encrustation of grooves with gold wire is a feature unknown, up till



Fig. 12. A silver rhyton from cache no. 2, barrow no. 1 in Filippovka. Ufa, Museum of Archaeology and Ethnography of the Centre of Ethnological Studies, Ufa Scientific Centre of the Russian Academy of Sciences, inv. 831/386 (photo after Cat. New York 2000, no. 94).

now, on items of toreutics of the Achaemenid circle. Though some of the Achaemenid silver vessels bear gold inlays, they are made in the form of thin gold plates, inserted in grooves in the walls. 155 At the same time, we see

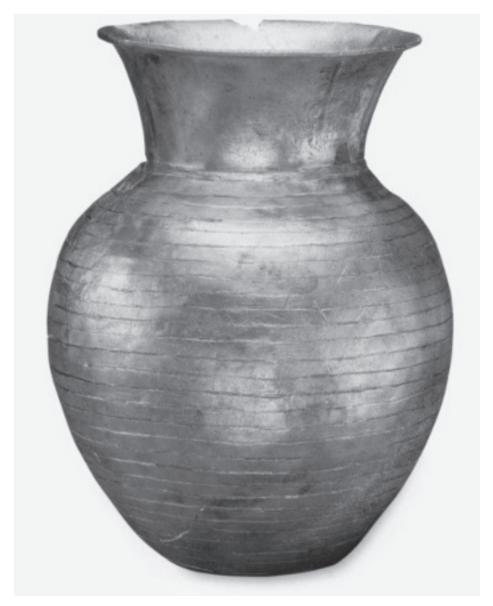


Fig. 13. A silver gold-inlaid vessel with flaring neck from cache no. 1, barrow no. 1 in Filippovka. Ufa, Museum of Archaeology and Ethnography of the Centre of Ethnological Studies, Ufa Scientific Centre of the Russian Academy of Sciences, inv. 831/387 (photo after Cat. New York 2000, no. 19).

motifs in gold wire or narrow strips of gold inlaid in silver on some items of Thracian toreutics dated to the first half to the middle of the fourth century BC. ¹⁵⁶ We cannot define precisely the centre of manufacture of the vessel from Filippovka or its exact date.

4.2.1.2. Vessels from Prokhorovka

Special studies devoted to the vessels from Prokhorovka allow me to avoid repetition of their analysis. 157 One of the phialae found in barrow no. 1 (Fig. 14) 158 may be dated to the second half of the fifth century BC, a second phiale from barrow no. 1 (Fig. 15) 159 and the cup from barrow B (Fig. 16) 160 belong to the second half of the fourth century BC.

The comparative material does not allow us to determine the manufacturing centre of the earlier phiale (Fig. 14), though parallels to its shape and decoration permit an attribution to the class of vessels which were broadly used in various satrapies of the Achaemenid Empire. From that point of view, the phiale now kept in Alma-Ata may be conventionally determined as an item of "Achaemenid international style".

The later phiale (Fig. 15), kept in Orenburg, was supposedly manufactured in Alexandria. The peculiar features of its shape and decoration testify that



Fig. 14. A silver phiale from Prokhorovka, barrow no. 1. Alma-Ata, National Museum of Kazakhstan, inv. KP 3986 (photo after Cat. Mantua 1998, no. 456).



Fig. 15. A silver phiale from Prokhorovka, barrow no. 1. Orenburg, Local Lore Museum, inv. 47/3 (photo courtesy of L.T. Jablonskij).



Fig. 16. A silver-gilt cup from Prokhorovka, barrow B, burial no. 3. Orenburg, Local Lore Museum, inv. 18873/1148 (photo courtesy of L.T. Jablonskij).

that is rather an "Achaemenid-inspired" item, executed in an early Hellenistic workshop, and one of the numerous articles executed also after the disintegration of the Achaemenid Empire in the territories of the former satrapies.¹⁶¹

For the "Achaemenid" bowls of the so-called Macedonian type, to which, given its shape, the cup from barrow B (Fig. 16) is rather close, a different decoration of the lower part of the body and the bottom is characteristic. Neither of the bowls found in Macedonia demonstrates similar incised and gilded floral patterns with ivy leaves. 162 The "Macedonian" bowls have rather standard dimensions; they are significantly smaller than the bowl from Prokhorovka. Similar decoration, in terms of shape and technique, occurs only on two bowls of somewhat different shape, with much more elongated necks: one of these bowls originates from south Italy, 163 the other from Thrace. 164 The lower parts of both bowls have vertical fluting, similar to those of the "Macedonian" bowls. In spite of the proximity in terms of form and proportion to the so-called Achaemenid bowls of Macedonian type, the dimensions and decoration of the bowl from Prokhorovka testify most probably to manufacture outside of Macedonia. However, given the peculiarity of its decoration, we do not possess data which would allow for a more precise localization of its workshop.¹⁶⁵

4.2.1.3. Comparative analysis of the imported metal vessels of the Filippovka and Prokhorovka necropoleis

In general, the silver vessels of the Achaemenid style from Filippovka (Figs. 9-13) are dated between the mid-fifth and the first half of the fourth century BC. The majority of them may be considered as products of Asia Minor and (or) Thracian workshops. The vessels found in Prokhorovka (Figs. 14-16) were manufactured in different centres and at different times: two of the three vessels are items not of the Achaemenid style, but, rather, they are "Achaemenid-inspired" objects, executed in the second half of the fourth century BC most probably in the Balkans and in Alexandria.

4.2.2. Jewellery

Not only the quantity of vessels, which constitute the most numerous group of Achaemenid and "Achaemenid-inspired" vessels of precious metals outside the borders of the Achaemenid Empire, and the variety of shapes speak in favour of a different pattern of distribution, but also the fact that some of the above-mentioned graves (Filippovka barrow nos. 4 and 15 and a barrow near Orsk) yielded finds of Achaemenid jewellery, including torques, bracelets and an element of a pectoral. Burial no. 4 of barrow no. 4/2006 of the Filippovka necropolis yielded gold jewellery in the Achaemenid style, including a torque (Fig. 17)¹⁶⁶ and an omega-shaped bracelet with sculpted images of ibexes (Fig. 18)¹⁶⁷ (similar images may be seen on the bracelets from the Oxus Treasure)¹⁶⁸. A barrow near Orsk yielded a torque with the terminals in the form of sculpted ibexes¹⁶⁹, similar to the images on the terminals of a pair of







Fig. 17. A gold torque from Filippovka, barrow no. 4, burial no. 4. Orenburg, Local Lore Museum, inv. 19066 (photo courtesy of L.T. Jablonskij).







Fig. 18. Gold bracelets from Filippovka, barrow no. 4, burial no. 4. Orenburg, Local Lore Museum, inv. 19105-19106 (photo courtesy of L.T. Jablonskij).

bracelets from Filippovka.¹⁷⁰ Comparable images of caprids decorate fragmentary gold torques from the Oxus Treasure¹⁷¹ and a piece now in Brooklyn.¹⁷² The modelling of the back legs in low relief with cells for inlays on the hoops (Fig. 18) finds parallels, for instance, on the gold bracelets with lion-griffin terminals from Dağ Kızılca Köyü near Manisa¹⁷³ and from the Oxus Treasure.¹⁷⁴ Also, the decoration of the ribbed hoop of the torque from Filippovka with transverse grooves (Fig. 17) finds numerous parallels in jewellery of Achaemenid style.¹⁷⁵ At the same time, Achaemenid-style seals are almost unknown,



Fig. 19. A gold inlaid plaque from Filippovka, barrow no. 15, burial no. 1. Orenburg, Local Lore Museum, inv. 18980/73 (photo courtesy of L.T. Jablonskij).

except for the find from barrow no. 2 near Pokrovka of a conical chalcedony stamp showing the king in a struggle with a lion.¹⁷⁶

A gold plaque with cloisonné decoration, showing a bearded man wearing typical Achaemenid headware (Fig. 19), was reused as an amulette in the female Sarmatian burial no. 1 of Filippovka barrow no. 15/2004.¹⁷⁷ Its closest parallel originates from Yozgat in Turkey.¹⁷⁸ Another piece of unknown origin is kept in the State Hermitage Museum.¹⁷⁹ Both plaques were originally parts of some complicated ornament, like a pectoral, which is now kept in Miho Museum.¹⁸⁰ The similarity of these objects, in terms of the images, style and decorative technique, with the gold roundels from Susa¹⁸¹ and an earring once in the Norbert Schimmel Collection¹⁸² is evident. The burial excavated in 1901 on the acropolis of Susa was previously dated to the very end of the Achaemenid period, based on the date of coins that were minted at Arad on the Syrian coast allegedly between 350-332 BC.¹⁸³ However, the coins and, correspondingly, the tomb itself and the jewellery it yielded were recently redated to the late fifth century BC.¹⁸⁴

4.2.3. Arms

The silver handle of a knife, decorated with a stag protome with gold-inlaid details, was found in burial no. 5 of barrow no. 5 in Filippovka. 185 It finds a close parallel in a hippopotamus ivory knife handle found in a tumulus at Dedetepe in northwestern Turkey, which is dated by the burial inventory to ca. 480-460 BC. 186 Its Achaemenid inspiration is further confirmed by the outlined beard leading to the ears and, especially, by the typical representation of the animal's hindquarters in relief, as we see on some of the Achaemenid rhyta,187 on the majority of amphora-rhyta188 and in jewellery.189 At the same time, the treatment of individual elements of the image (the eyes, wings, joints, shoulder blades etc.) on the knife handle from Filippovka vary from the characteristic canons of Achaemenid-style art. Although the silver figures of animals in the round which were used primarily as vessel handles are often additionally inlaid with gold, 190 the decoration of the knife handle from Filippovka differs from these in the shape of the gold inlays, which are comparable with the gold-inlaid decoration on the iron swords, quiver hooks and knife from Filippovka¹⁹¹ and on the dagger from the princely Saka burial in Issyk barrow in Kazakhstan.¹⁹² The suggestion that this technique had early roots with the Eurasian nomads is corroborated by its use already in the

seventh century BC, based on the evidence of the decoration of an axe¹⁹³ and arrowheads¹⁹⁴ from barrow Arzhan-2 in south Siberia. Thus, it is evident that the handle of the knife from Filippovka cannot be considered as an example of the Achaemenid international style, although it was inspired by such an item, most probably of Asia Minor manufacture in the first half of the fifth century BC. We do not know who created this knife handle. The peculiarities of style and the inlaid technique do not exclude the possibility that it could have been manufactured either in a provincial Achaemenid workshop where its craftsmen considered the tastes of the Sarmatian client or by a Sarmatian metalworker after Achaemenid prototypes.

4.2.4. Changes of function and repairs

Another important feature is a change of function for some of the objects by the Sarmatians. In contrast to the finds from Colchis and northeastern Georgia, which are represented both by imports from the Achaemenid Empire, most of which were manufactured presumably in Anatolia, as well as by locally made "Achaemenid-inspired" items, one of the objects found in south Ural may be identified as a locally-made item imitating metalware or jewellery of Achaemenid type. At the same time, the phialae from barrow no. 1 near Prokhorovka had secondary use as phalerae of horse-harnesses (Figs. 14-15), while one of them bears signs of a handicraft repair, by means of sewing with the help of a narrow silver strip (Fig. 15). 195 One of the handles of a silver-gilt amphora-rhyton (Fig. 10) from barrow no. 4/2006 near Filippovka was lost and the vessel was most probably used as an incense-burner. 196

5. The means of distribution

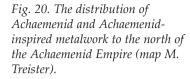
A.Yu. Alekseev suggests that the Chertomlyk sword (Fig. 3) could have been a gift from Alexander the Great to the Scythians, in exchange for the gifts sent from Scythia, or that it could have been a Scythian heirloom that somehow made its way from Persia in the fifth century BC, perhaps via the Saka tribes.¹⁹⁷ According to E.V. Chernenko, the sword could have been booty that the Scythians captured from the Persians during Dareios' invasion of the steppes at the end of the sixth century BC.¹⁹⁸ All these suggestions seem to me to be mere speculations, as we do not have any conclusive data for dating the sword and its reworking.

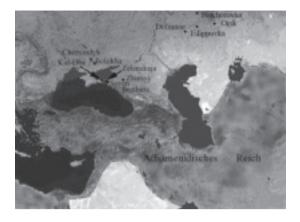
The possible manufacture of the Seven Brothers rhyton (Figs. 1, 2) in an Anatolian workshop, working in the Achaemenid style, as well as the burial inventory do not give us any hints concerning the possible relation of the find to direct contacts with the Achaemenid Empire, although one cannot exclude the possibility that the rhyton was a diplomatic gift. Such a function fits the suggestion that the Seven Brothers barrows formed a necropolis of the Sindian kings, ¹⁹⁹ and the proximity of the dates of the rhyton and the burial. It is worth noting that the earliest items of toreutics and glyptics of the

Achaemenid style find their way into Cimmerian Bosporus and Sindike not later than the middle of the fifth century BC, during the rule of Artaxerxes I. Most of the cylinder seals and scaraboids, whose provenance is known to us (Fig. 8), originate from the fourth century burials. However, the earliest burial complex containing such a find – the tomb of a warrior excavated in Nymphaion in 1876 (see Appendix 1, no. 9) – is dated already to the first half of the fifth century BC. Is it possible to discuss them as evidence of diplomatic contacts of the Achaemenid Empire, for which, in the period discussed – the last stage of the Graeco-Persian Wars before the Kallias Peace (449 BC) - the strengthening their positions in the basin of the Black Sea could have a certain interest? Although the material in our possession does not give any grounds for direct historical conclusions, undoubtedly it reflects certain contacts (see below). In any case, we have a striking similarity in the distribution patterns of the Achaemenid seals of the fifth to fourth centuries BC and the bronze finger rings of the late third century BC of Ptolemaic type in the north Pontic area,²⁰⁰ which can hardly be coincidental.

There are also several examples of bronze and silver phialae of Achaemenid types, found both in the early burial of the royal Scythian barrow of Solokha (Fig. 5) as well as in the fourth century BC burials on the Taman peninsula (Zelenskaya Gora: Fig. 7) and in the Kuban area (Zhirnyi barrow: Fig. 6). The Kul'-Oba rhyton with a ram protome (Fig. 4) testifies that toreutic items of Achaemenid style were known in the north Pontic area and were even imitated by local craftsmen.

The various patterns of distribution of Achaemenid goldware and silverware and jewellery by the early Sarmatian tribes of the south Ural area (Fig. 20) suggest a different explanation of the means of their distribution. One of the burials in the barrows near Orsk (not the same one with the gold torque, executed in the Achaemenid style, and a silver rhyton) contained an alabastron with a quadralingual inscription with the name of Artaxeres, most probably Artaxerxes I,201 and the most plausible explanation, according to R. Schmitt, is that "solche Gefäße als Geschenke des Großkönigs für irgendwelche Verdienste aufzufassen sind, die die so Ausgezeichneten dann mit nach Hause genommen haben...".202 Also, A.S. Balakhvanstev and L.T. Yablonskij maintain that such prestigious objects could have been donated to chiefs of nomads for their service as mercenaries for the Achaemenids.²⁰³ These suggestions seem to be appropriate explanations. It is maintained that the major stream of objects of Near Eastern and Egyptian origin penetrated to the south Ural region via Khoresm²⁰⁴ and could hardly have found their way into this area after the independence of Khoresm from the Achaemenid Empire, not later than the late fifth century BC.²⁰⁵ If one accepts this, then most of the Achaemenid-style vessels found in Filippovka and the phialae and bowl found in Prokhorovka (i.e. both the vessels allegedly manufactured in Asia Minor workshops in the second half of the fifth to the first half of the fourth century BC and the "Achaemenid-inspired" items of the second half





of the fourth century BC manufactured by craftsmen of the eastern Mediterranean and the Balkans) found different ways to the Sarmatians of the south Ural region.

One explanation with regard to the finds of silver vessels in Prokhorovka is the suggestion that the Sarmatians could have acquired them during the plundering of the Macedonian transport. This hypothesis is based on the passages in Diodoros and Curtius Rufus which state that the Dachoi and Massagetae served under Dareios III and played an important role in the battle near Arbellae (Diod. 17.59; Curt. 4.15.1-12). To my mind, this is a plausible explanation of the finds of parts of objects and the dense distribution of various categories of objects, a considerable number of which was reworked or used in a way other than the original function. In any case, the same way via Dachoi is suggested by A.S. Balakhvantsev and L.T. Jablonskij for the silver bowl found in Prokhorovka barrow B (Fig. 16). The silver bowl found in Prokhorovka barrow B (Fig. 16).

Appendix 1. Achaemenid seals in the north Pontic area²⁰⁹

Seals which are more or less contemporary with the date of the burials in which they have been found have been identified in Seven Brothers barrow no. 3 (no. 9). The barrow is allegedly associated with the latest Sindian king, Hekateios.²¹⁰ Also, both finds from Nymphaion (nos. 10-11) seem to be more or less close in date to those of the respective burials. However, some of the seal finds originate from distinctly later complexes, for instance, a scaraboid (no. 7) which is dated to the first half of the fourth century BC was found in a rather modest female burial on the Mithridates mound in Kerch dated to the late fourth to early third century BC. A fifth to fourth century BC seal (no. 12) was found in the burial of the "3rd Dame" in Bol'shaja Bliznitsa tumulus, which is also dated to the late fourth to early third century BC. A fourth century BC scaraboid (no. 6) was found in a cremation dated to the first half of the third century BC. Two early fourth century seals (nos. 1, 2) originate from a destroyed female burial in a wooden sarcophagos in a barrow at Stanitsa

Blagoveshchenskaja near Anapa, which is dated to the mid-third century BC; a prism seal from this barrow (no. 2) and a cylinder seal from Chersonesos (no. 13) were in secondary use.

Seals with recorded find context

1. Blagoveshchenskaja near Anapa, a barrow, excavated by V.G. Tiesenhausen in 1882.

Cylinder seal. A Persian, wearing a tiara, stands with raised hands facing a radiate goddess, standing on a lion's back. The Arndt Group. Surely cut in Anatolia (Boardman 2000, 165).

Blue chalcedony.

Date: early fourth century BC.

Date of the complex: mid-third century BC (Pfrommer 1990b, 262, FK 120). On a wooden sarcophagos, see Sokol'skij 1969, 29-31, no. 21 with bibliography. State Hermitage, inv. $\Gamma \pi$. 1882.55.

Literature: CR St Petersburg 1882-1888, pl. V.3-3a; Boardman 2000, 163, fig. 5.19, 165; Boardman 2001, 353, pl. 878; Cat. St Petersburg 2004, 30, no. 7.

2. Blagoveshchenskaja near Anapa, a barrow, excavated by V.G. Tiesenhausen in 1882.

Four-sided prism seal (A) a Persian holding a bow; (B) a bearded Greek, in a himation, playing with a dog; (C) a naked woman stretching; (D) two cocks fighting. Greek style.

Cornelian.

Date: early fourth century BC.

Date of the complex: mid-third century BC (Pfrommer 1990b, 262, FK 120). State Hermitage, inv. Γπ. 1882.56.

Literature: CR St Petersburg 1882-1888, 60, pl. V.1-1a; Neverov 1976a, no. 44; Neverov 1983, 110-111; Nikulina 1994, fig. 291; Boardman 2001, 352, pl. 861; Cat. St Petersburg 2004, 30, no. 8.

3. Kerch, 1834. Tomb number or description unknown to me.

Cylinder seal. Persian king in battle with Greek warriors; a symbol of Akhuramazda above.

Discoloured stone in gold frame with double hoop.

Date: fifth century BC.

Date of the complex: unknown to me.

State Hermitage, inv. Π . 1834.71.

Literature: Reinach 1892, 58, pl. XVI.2-3; Cat. St Petersburg 2004, 30, no. 9.

4. Kerch, 1842. Tomb number or description unknown to me.

Cylinder seal. Persian king, two sphinxes, a Demon under a palm tree; a symbol of Akhuramazda above.

Cornelian, on a gold chain.

Date: fifth century BC.

Date of the complex: unknown to me.

State Hermitage, inv. Π . 1842.112.

Literature: Reinach 1892, 59, pl. XVI.5-6; Nikulina 1994, fig. 426; Cat. St Petersburg 2004, 30, no. 10.

5. Kerch, excavations at the Pavlovskaya battery by A.B. Ashik in 1842. Cist tomb with a female burial in a wooden sarcophagos.

Scaraboid. Two sphinxes sitting in crowns, over them a Lydian inscription. Court style. West Anatolian stamp seal (Boardman 2000, 166).

Cornelian, flattened gold hoop, widening in the centre.

Date: fifth century BC.

Date of the complex: late fifth century BC (Boardman 1970, 37, n. 98). About the complex, see Reinach 1892, 50 (gold finger ring pl. XVIII.9; bronze mirror, alabaster).

State Hermitage, inv. Π. 1842.111.

Literature: Reinach 1892, 59, pl. XVI.10; Boardman 1970, 39, no. 5, pl. 1.5; Nikulina 1994, fig. 447; Boardman 2000, 166-167, fig. 5.27; Boardman 2001, 351, pl. 834; Cat. St Petersburg 2004, 31, no. 12; Fedoseev 2007, 1022, fig. 16.4. Cf. a similar hoop, widening in the centre: a scaraboid from Pavlovskij barrow (Boardman 2001, pl. 822).

6. Kerch, 1852. Tomb number or description unknown to me. Sent to the Hermitage by L.A. Perovskij in 1853.

Scaraboid. A sphinx.

Discoloured stone, flattened gold hoop.

Date: fifth century BC.

Date of the complex: unknown to me.

State Hermitage, inv. Π. 1852.18.

Literature: Reinach 1892, 59, pl. XVI.14; Cat. St Petersburg 2004, 32, no. 19.

7. Kerch, 1839. Tomb II in a barrow on the way to Churubash, excavated by A.B. Ashik. Scaraboid. A Persian warrior, leaning on a spear.

Chalcedony.

Date: fourth century BC.

Date of the complex: mid-third century BC(?). A scaraboid with an image of a stag (Reinach 1892, 59, pl. XVI.9), a gold finger ring (Reinach 1892, 61, pl. XVIII.1), a bronze finger ring with a portrait image of Ptolemy II (Reinach 1892, 62, pl. XVIII.12; Neverov 1976b, 167, 170, pl. I.3, 179, n. 7) and earrings (Reinach 1892, 47, pl. VII.1) were found in a "painted vase with the profiles of a female head and the head of a horse". About the complex, see Reinach 1892, 59; Neverov 1976b, 167.

State Hermitage, inv. Π. 1839.8.

Literature: Reinach 1892, 60, pl. XVII.9; Maximowa 1928, 669, fig. 23; Neverov 1976a, no. 40; Nikulina 1994, fig. 351; Boardman 2001, 290, pl. 532; Cat. St Petersburg 2004, 33, no. 26.

8. Kerch, Mithridates mount, excavated by V.V. Shkorpril, burial no. 25/1907. Scaraboid. A running sphinx.

Chalcedony.

Date: first half of the fourth century BC.

Date of the complex: late fourth to early third century BC. Among other finds, six copper coins (Burachkov 1884, pl. XX, 89 = Shelov 1978, pl. V, 56 = Anokhin 1986, pl. 3, 112) and one copper coin (Burachkov 1884, pl. XX, 93 = Shelov 1956, pl. V, 55 = Anokhin 1986, pl. 3, 113) were found. According to V.A. Anokhin, the coins belong to the series Π-24, which he dates to ca. 314-310 BC (Anokhin 1986, 140). E.M. Alekseeva dates the beads found in the burial to the second half of the fourth to the third century BC (Alekseeva 1975, 76, no. Π200). A gold finger ring with an image of a lion attacking a bull (Shkorpil 1910, 18, fig. 3) is dated to the fourth century BC (Neverov 1986, 23, 27, n. 75).

State Hermitage, inv. Π . 1907.7.

Literature: CR St Petersburg 1907, 79, fig. 68; Pharmakowsky 1908, 169 f.; Shkorpil 1910, 18, fig. 2; Neverov 1976a, no. 49; Neverov 1983, 109; Nikulina 1994, fig. 290; Cat. St Petersburg 2004, 34, no. 32.

9. Seven Brothers barrow no 3, excavated by V.G. Tiesenhausen in 1876.

Scaraboid. A bear. The Group of Leaping Lions.

Chalcedony. Gold hoop, circular in section.

Date: first half of the fourth century BC.

Date of the complex: first quarter of the fourth century BC (Vlasova 2001b, 131), after the find of a Thasian stamp of the early fourth century BC. State Hermitage, inv. C5p. III.1.

Literature: Artamonow 1970, pl. 131; Neverov 1976a, no. 47; Nikulina 1994, fig. 262; Boardman 2001, 354, pl. 910; Cat. St Petersburg 2004, 35, no. 35.

10. Nymphaion, barrow no. 24/1876, tomb no. 19 1876, burial of a warrior.

Scaraboid. (A) A cow with a calf; (B) a symbol of Ahuramazda.

Obsidian. Gold hoop, circular in section.

Date: first half of the fifth century BC.

Date of the complex: first half of the fifth century BC.

State Hermitage, inv. FK/H. 84.

Literature: CR St Petersburg 1877, 224, pl. III; Minns 1913, 208, fig. 106; Silant'eva 1959, 56, fig. 24.2; Brentjes 1967, 239, pl. I; Artamonow 1970, 24, fig. 36; Neverov 1983, 108; Neverov 1995, 72-73, no. 15, pl. XII.3; Cat. St Petersburg 1999, 112, no. 293; Cat. St Petersburg 2004, 35, no. 35.

11. Nymphaion, barrow no. 5/1868, female burial.

Scaraboid. A winged lion, standing on its hind paws.

Chalcedony.

Date: first half of the fourth century BC.

Date of the complex: first half of the fourth century BC(?).

Oxford, Ashmolean Museum, inv. AN 1885. 491.

Literature: Vickers 1979, 44, pl. 14b-c; Boardman 2001, pl. 838; Vickers 2002, 9, 42-43, pl. 15 (below).

12. Great Bliznitsa tumulus, the so-called burial of the "3rd Dame", excavated in 1868.

Octogan seal. Persian king in a struggle with a lion. Court style.

Chalcedony, flattened hoop.

Date: fifth to fourth century BC.

Date of the complex: late fourth to early third century BC (Pruglo 1974, 77; Schwarzmaier 1996, 136).

State Hermitage, inv. ББ. 123.

Literature: CR St Petersburg 1869, pl. I.18; Boardman 1970, 42, no. 86, pl. 4; Neverov 1983, 107; Nikulina 1994, fig. 445; Schwarzmaier 1996, 123, fig. 10 (below right); Boardman 2001, 351, pl. 824; Cat. St Petersburg 2004, 31, no. 14.

13. Chersonesos, 1853.

Cylinder seal, fragmented. A mounted Persian with a spear.

Cornelian.

Date: fourth century BC.

Date of the complex: unknown to me.

State Hermitage, inv. X. 1853.5

Literature: Neverov 1983, 111; Neverov 1984, 47; Cat. St Petersburg 2004, 31, no. 11.

14. Phanagoria, tile burial in a barrow to the west of the site, excavated in 1954. Scaraboid. A female with a phiale in her hand.

Chalcedony, flattened gold framing.

Date: middle to second half of the fourth century BC.

Date of the complex: late fourth to early third century BC.

Moscow, State Pushkin Museum of Fine Arts, inv. Φ-1138.

Literature: Marchenko 1960, 22-27; Nikulina 1965, 186, fig. 1.11, 192-195; Finogenova 1993, no. 3; Nikulina 1994, fig. 516; Cat. St Petersburg 2004, 31, no. 11.

15. Smela, Cherkassy region, Ukraine, a group of barrows over Kholodnyj Jar, barrow no. 19/1885.

Cylinder seal. Horse galloping to the right. A symbol of Ahuramazda above.

Chalcedony.

Date: late fifth to fourth century BC.

Date of the complex: fourth century BC (Petrenko 1967, 95).

Literature: Bobrinskij 1887, 76, fig. on p. 77; Minns 1913, 193, fig. 85; Rostow-zew 1931, 425, Achaemenid; Onajko 1970, 119, no. 849, pl. XVIII.

The closest parallel is a chalcedony cylinder seal in Berlin attributed as an item of the Achaemenid court style: Boardman 2000, 159-160, fig. 5.14; Boardman 2001, 351, pl. 831; Cat. Speyer 2006, 45.

Greco-Persian seals most probably found in the territory of the Bosporan Kingdom

16. From the collection of A. Zvenigorodskij (Kerch), acquired by the State Hermitage Museum in 1880.

Cylinder seal. A Persian king and defeated enemies.

Chalcedony.

Date: late fifth to early fourth century BC.

State Hermitage, inv. $\Gamma \Lambda$ 501.

Literature: Lukonin 1977, 86 (ill.); Nikulina 1994, 419; Boardman 2000, 159, 160, fig. 5.6; Cat. St Petersburg 2004, 30, no. 6.

17. Acquired in Kerch by N.P. Kondakov.

Scaraboid. Two Persian hunters in a chariot. The Cambridge Group.

Discoloured stone. Gold hoop, circular in section.

Date: fifth to fourth century BC. State Hermitage, inv. X 428.

Literature: Nikulina 1994, fig. 511; Boardman 2001, 355, pl. 928; Cat. St Petersburg 2004, 32, no. 17.

18. From the collection of A.V. Novikov (Kerch), acquired by the State Hermitage Museum in 1900.

Scaraboid. A Persian archer. The Pendants Group.

Discoloured stone.

Date: first half of the fourth century BC.

State Hermitage, inv. $\Gamma\Lambda$ 895.

Literature: Nikulina 1994, fig. 515; Boardman 2001, 353, pl. 887; Cat. St Petersburg 2004, 33, no. 25.

19. From the collection of E.M. Kir'jakov (Kerch).

Scaraboid. A Persian female with vases.

Discoloured stone.

Date: fourth century BC. State Hermitage, inv. X 427.

Literature: Knipovich 1926, pl. III.5; Cat. St Petersburg 2004, 33, no. 24.

Notes

- * I would like to express my gratitude to Leonid Jablonskij (Institute of Archaeology, Moscow) for the supply of photographs and to Margaret Miller (University of Sydney) for revision of the English version of the text.
- 1 Koshelenko 1999, 130-142.
- 2 Moley 2001.
- 3 Fedoseev 1997, 310-319.
- 4 Fedoseev 1997, 310-311.
- 5 Maksimova 1956, 190-196; Fedoseev 1997, 310.
- 6 Fedoseev 1997, 311-312.
- 7 Fedoseev 1997, 312-313.
- 8 Melikian-Chirvani 1993, 111-130.
- 9 Vlasova 2001a, 20-27.
- 10 CR St Petersburg 1877, 15-16, pl. I.5; Smirnov 1909, pl. IV, no. 15; Ghirshman 1964, 358, fig. 462; Anfimov 1987, 106-107; Dandamaev & Lukonin 1989, 265, fig. 32; Melikian-Chirvani 1996, 98-99; Vlasova 2000, 55, no. 3; Vlasova 2001a, 20-23, fig. 1.3, 25, no. 1; Cat. St Petersburg 2004, 28-29, no. 4 with bibliography; Cat. St Petersburg 2007, 279, no. 315.
- 11 MMA Bull. Spring 1992, 16.
- 12 Ivanov 1975, 20; Marazov 1978, 50-53; Luschey 1983, 326, no. B13, pl. 59.4; Cat. Saint Louis 1998, 225, no. 176; Cat. Bonn 2004, 195, no. 226d; Cat. Paris 2006, 76-77, no. 15.
- 13 MMA Bull. Spring 1992, 16.
- 14 Cat. Berlin 1978, no. 177; Marazov 1978, 54, fig. 49; MMA Bull. Spring 1992, 16; Koch 1992, 185, pl. 22; Cat. New York 2000, 154, fig. 68; Miller 2007, 56-57, fig. 7.
- 15 MMA Bull. Spring 1992, 16.
- 16 Sotheby's, New York, 7 December 2001. *Egyptian, Classical and Western Asiatic Antiquities Including Property from the Collection of the Late Marion Schuster, Lausanne*. Sale no. 7742, no. 155.
- 17 Cat. Vienna 2000, 206, no. 118.
- 18 Cat. Paris 1961, no. 684, pl. LV; Ghirshman 1964, 255, fig. 308; Cat. Vienna 2000, 200, no. 114.
- 19 Antikenmuseum Berlin 1988, 329, no. 1; Cat. Berlin 2002, 140, no. 39; Cat. Speyer 2006, 188-189, fig. 1.
- 20 Amandry 1959, 50, pl. 27.2-3; Boardman 2000, 188, fig. 5.70; Cat. London 2005, 125, no. 128.
- 21 Waldbaum 1983, 151, no. 996, pl. 58.
- 22 Filow 1934, 46, no. 14, figs. 55-59, 199-210, pl. III; Marazov 1978, 14-18; Luschey 1983, 323, no. A2 with bibliography, pl. 59.4; Pfrommer 1990a, 193, pl. 40.2, n. 13; Cat. Saint Louis 1998, no. 117; von Gall 1999, 154, 156-157, figs. 7-8; Boardman 2000, 190, fig. 5.71; Zournatzi 2000, 684, fig. 1, 685, 687. On the dating of the burial, see Pfrommer 1990a, 193, n. 15.
- 23 See n. 14.
- 24 Smirnov 1909, pl. V.17; Lukonin 1977, 85 (ill.); Marazov 1978, 12-13, fig. 4, 55 (erroneously described by I. Marazov as a rhyton from Ust'-Kamenogorsk); Luschey 1983, 318, pl. 60.1; Dandamaev & Lukonin 1989, 88, fig. 21; Miller 1993, 123, pl. 24.4.
- 25 von Bothmer 1984, no. 49.

- 26 Waldbaum 1983, no. 973, pl. 57. On parallels in the Lydian pottery repertoire, see also Waldbaum 1983, 148.
- 27 Miller 1993, 126, pl. 29.1.
- 28 Calmeyer 1993, 132, pl. 45 (top).
- 29 Vickers 2000. See the fragment of the relief with Delegation XV: Calmeyer 1993, 136-137, pl. 47 (below); Cat. London 2005, 106, fig. 47 (Parthians or Bactrians).
- 30 Khoshtaria et al. 1972, 115, no. 44, fig. 60; Gigolashvili 1990a, 316-317; Guigolachvili 1990b, 279-280, 313, fig. 32; Vickers 2000, 263, fig. 2.
- 31 Archibald 1998, 181, fig. 7.5 (top right); Vickers 2000, 261-262, fig. 1.
- 32 Cat. Paris 1961, no. 664, pl. LVII; Ghirshman 1962, 77, fig. 24; Ghirshman 1964, 242, fig. 290; Dandamaev & Lukonin 1989, 86, fig. 19; Koch 1992, 191, fig. 140: Cat. Vienna 2000, 200-201, no. 113; Cat. London 2005, 121, no. 118.
- 33 Dalton 1964, no. 178, pl. XXII; Dandamaev & Lukonin 1989, 87, fig. 20; Miller 1993, 123, pl. 24.5; Boardman 2000, 184-185, fig. 5.66; Cat. London 2005, 122, no. 119.
- 34 Cat. New York 1992, 230-231, no. 158; Boardman 2000, 81, fig. 2.66, 246, n. 130 with various examples.
- 35 Cat. Miho 2002, no. 107.
- 36 Cat. Vienna 1999, 63-64, no. 26.
- 37 In general on this class of vessels, see Amandry 1959, 38-56; Ghirshman 1962, 79; Pfrommer 1990a, 191-209; Boardman 2000, 188-189, 246, n. 129. Such a silver-gilt vessel of unknown provenance is kept in the J. Paul Getty Museum (Pfrommer 1990a, 191-192, pls. 36-39.2, 44; Boardman 2000, 191, fig. 5.72). Another piece, with the body decorated with vertical fluting and allegedly found in Iraq, was kept in the Pomerance Collection (Cat. Paris 1961, no. 685; Cat. Brooklyn 1966, no. 59; Pfrommer 1990a, 195, pl. 41.1). A further similar silver vase, with vertical fluting on the body and allegedly found in southwestern Iran, was kept in the Borowski Collection (Basel) and acquired by the Museum für Vor- und Frühgeschichte der Staatlichen Museen zu Berlin in 1967 (Cat. Paris 1961, no. 677, pl. LIV; Ghirshman 1962, 79, fig. 31; Ghirshman 1964, 271, fig. 333; Cat. Berlin 2002, 138-140, no. 38; Cat. Speyer 2006, 132-133, figs. 8-9).
- 38 See n. 22.
- 39 Amandry 1959, 48-50, 52-54, pl. 24; Cat. Paris 1961, no. 675, pl. LIII; Summerer 2003, 32, fig. 10.
- 40 Cat. St Petersburg 1993, no. 205; Cat. London 1994, no. 205; Cat. Berlin 1996, no. 205; Summerer 2003, 30-31, fig. 9.
- 41 Calmeyer 1993, 152-153, pl. 44 (above); Cat. London 2005, 106, fig. 46; Cat. Speyer 2006, 132, fig. 7; Miller 2007, 45-46, fig. 1.
- 42 Calmeyer 1993, 153, pl. 43 (below left); von Gall 1999, 158, fig. 9; Boardman 2000, 188, fig. 5.69; Summerer 2003, 33; Cat. Speyer 2006, 198, fig. 5.
- 43 Filow 1934, 201-202; see also von Gall 1999, 154.
- 44 Filow 1934, 202.
- 45 Pfrommer 1990a, 205, 208-209.
- 46 Özgen & Öztürk 1996, 89, no. 35; Miller 2007, 50-52, fig. 2, 54-55, fig. 5.
- 47 Toker 1992, 173, 223, no. 152; Miller 2007, 52-53, fig. 4.
- 48 See nn. 22, 40.
- 49 Moshkova 1981, 171-175, figs. 1-4.
- 50 On the date of the burial, see, for example, E.V. Vlasova, in Cat. Bonn 1997, 89.

- 51 Maximova 1928, 665-666, fig. 22; Ghirshman 1964, 358, fig. 463; Artamonow 1970, pls. 183-184; Cat. New York 1975, 108, no. 67; Lukonin 1977, 77 (ill.), Alekseev 1984; Chernenko 1984, 48-50, fig. 25; Galanina & Grach 1986, pl. 220; Alekseev et al. 1991, 234, no. 192; Cat. Hamburg 1993, 104-105, no. 54; Cat. Zurich 1993, 134-135, no. 69; Cat. New York 2000, 233, no. 163; Cat. Milan 2001, 122, no. 71; Alekseyev 2005, 55, fig. 4.5; Alekseev 2007, 250, fig. 7; Cat. St Petersburg 2007, 276, no. 312.
- 52 Artamonow 1970, pls. 183, 185; Cat. New York 1975, 109, no. 68; Galanina & Grach 1986, pls. 221-222; Alekseev et al. 1991, 230, 234, no. 191; Cat. Hamburg 1993, 104-107, no. 55; Cat. Zurich 1993, 114-115, no. 60; Cat. New York 2000, 233-235, no. 164; Cat. Milan 2001, 122-123, no. 72; Alekseev 2007, 252-253, fig. 9.
- 53 Nefedkin 1998, 71-76; Pfrommer 2002, 267-274; Alekseev 2006, 166; Alekseev 2007, 254.
- 54 Chernenko 1975, 163; Chernenko 1984, 49.
- 55 Alekseev 1984, 38-41; Chernenko 1984, 49; Alekseev et al. 1991, 99-102; cf. Alekseev 2006, 166; Alekseev 2007, 254.
- 56 Lukonin 1977, 77.
- 57 Chernenko 1984, 49-50; Alekseev 1984, 38-41; Alekseev et al. 1991, 99-103, fig. 69.
- 58 Minasjan 1991, 382.
- 59 Boardman 2000, 72, fig. 2.56a; Cat. London 2005, 53, fig. 44.
- 60 Cat. London 2005, 233, no. 430.
- 61 Cat. London 2005, 234, no. 433.
- 62 Ghirshman 1964, 160-165, fig. 211, 170, fig. 216, 193, fig. 240; Cat. London 2005, 78-81, no. 39; Cat. Speyer 2006, 124-125, 148-149.
- 63 Cat. London 2005, 84, no. 46; Cat. Speyer 2006, 114, fig. 1.
- 64 Maximova 1928, 665-666; Alekseev et al. 1991, 100-102.
- 65 Dalton 1964, no. 24, pl. X; Litvinsky 2001, 157-158, fig. 9; Cat. London 2005, 220-221, no. 396.
- 66 Chernenko 1984, 49; Alekseev et al. 1991, 99.
- 67 Artamonow 1970, pl. 250; Marazov 1978, 53-55, fig. 48; Cat. Leningrad 1985, 22, no. 14; Galanina & Grach 1986, fig. 211; Cat. New York 2000, 210-211, no. 147; Cat. Milan 2001, 106, no. 55; Fedoseev 2007, 990, 1010, figs. 4, 8.
- 68 See, for example, Treister 2005, 58.
- 69 Bidzilja 1971, 49, fig. 4; Orfèvrerie ancienne 1975, n.p.
- 70 Alekseev et al. 1991, 90-91, fig. 63; Alekseev 1993, 72-75; Schneider & Zazoff 1994, 196-197, fig. 36; Cat. St Petersburg 2004, 42-43, nos. 45-46; Alekseyev 2005, 54, n. 106, 189; Cat. St Petersburg 2007, 117, no. 69.
- 71 See n. 37.
- 72 Smirnov 1934, 24-30, no. 26, pl. III.26; Ghirshman 1964, 265, fig. 325; Talbot Rice 1965, 23, fig. 12; Lordkipanidze 1972, 55; Gagoshidze 1985, 58-59, fig. 22; Dschwachischwili & Abramischwili 1986, figs. 38-39; Lordkipanidze 1991, 123, pl. 54.1-2; Boardman 1994, 341, n. 111; Cat. Saarbrücken 1995, no. 299, fig. 162; Boardman 2000, 196, 198, fig. 5.82; Korol'kova 2003, 54, fig. 4.1; Bill 2003, 211, no. 81.33, pl. 122.1; Cat. London 2005, 47, fig. 36; Knauss 2006, 81, 83, fig. 2.
- 73 Smirnov 1934, XX.
- 74 Lordkipanidze 1989, 323, n. 13; Lordkipanidze 1994, 153, n. 40; Bill 2003, 210-212, no. 81, pls. 121-125.
- 75 Lordkipanidze 1971, 270-271, fig. 6; Lordkipanidze 1972, 54-55, fig. 39; Khoshtaria et al. 1972, 114, no. 2, fig. 39; Chkonia 1977, 96-100, 189, figs. 85-90; Chkonia

- 1981, no. 16, pls. 8-9; Dschwachischwili & Abramischwili 1986, figs. 13-14; Lordkipanidze 1989, col. pl. XIII; Chkonia 1990, 291; Tchkonia 1990, 262, 304, fig. 18; Lordkipanidze 1991, 123, pl. 51.9-10; Boardman 1994, 220; Cat. Saarbrücken 1995, no. 273, fig. 146; Lordkipanidze 1995, 371, col. pl. II.3; Chqonia 1996, 46, 48, fig. 5; Vani 9 1996, pl. 9 (below right); Čkonia 2002, 269-270; Korol'kova 2003, 54, fig. 4.1; Bill 2003, 81-82, 231, no. 7, fig. 11.6, pl. 163.10-13; Cat. Berlin 2007, 38-39.
- 76 See, for example: frontlets from Biniova Mogila (Cat. Saint Louis 1998, 98, no. 6); Dolna Koznitsa (Cat. Saint Louis 1998, 104, no. 15), Kralevo (Cat. Saint Louis 1998, 118, no. 37); Goliamata Kosmatka (Cat. Paris 2006, 154, no. 56).
- 77 Onajko 1970, 101, no. 410, pl. XVI; Mantsevich 1987, 39, no. 12; Pfrommer 1987, 243, KaBT13.
- 78 Anfimov 1966, 22, fig. 5.
- 79 Pfrommer 1987, 52-54, 241-245.
- 80 Pfrommer 1987, 53, 243, KaBT13.
- 81 Pfrommer 1987, 243, KaBT17. A.P. Mantsevich (1987, 39) compares the shape of the bowl from Solokha with those from Raduvene, which seems erroneous.
- 82 Cat. Cologne 1979, 117, no. 220; Pfrommer 1987, 244, KaBT20; Cat. Montreal 1987, 175-177, nos. 261, 264, 268. See also a similar bowl of unknown provenance in the Historical Museum, Sofia (Cat. Bonn 2004, 147, no. 200).
- 83 Çokay-Kepçe 2006, 152, no. MT1, 184.
- 84 Pfrommer 1987, 220, KaB A 68-70, pl. 42c-d; Cat. London 2005, 117, nos. 106-108.
- 85 Pharmakowsky 1913, 185-186, fig. 14; Shkorpil 1916, 30, fig. 16; Luschey 1939, 78, no. 34; Maksimova 1979, 72, 74, fig. 23, A2; Pfrommer 1987, 155, n. 1013; Abka'i-Khavari 1988, 106, 122, F2C16; Treister 2003, 58-60, fig. 7.
- 86 Themelis & Touratsoglou 1997, B 18-19, pls. 66-7; Tsigarida & Ignatiadou 2000, 70, fig. 70.
- 87 Delemen 2006, 260-261, fig. 9.
- 88 Strong 1966, 99; von Bothmer 1984, 47, no. 75; Sideris 2000, 17, 19.
- 89 Cat. New York 1992, 244, no. 170; Cat. London 2005, 178, no. 277.
- 90 Cat. Toledo 1977, no. 12; von Bothmer 1984, no. 79; Pfrommer 1987, 249, KBk 19, pl. 50c-d.
- 91 Strong 1966, 99.
- 92 Pfrommer 1987, 154-155, n. 1013.
- 93 Pfrommer 1987, 267, pls. 11, 14a, KTK 8.
- 94 Pfrommer 1987, 267, KTK 10, pl. 13b.
- 95 Woolley 1962, 105, pl. 32, no. 9; Abka'i-Kavari 1988, 121-122, F2C8.
- 96 Dalton 1964, 9, no. 19, pl. V; Cat. London 2005, 116, no. 105.
- 97 See, in general, Archibald 1998, 262-264, figs. 11.2-3, 319-321. Alexandrovo: one of the bowls is additionally decorated with a silver-gilt medallion in the interior (Cat. Montreal 1987, 204, no. 335; Cat. Venice 1989, no. 143/2; Cat. Florence 1997, no. 191; Archibald 1998, 319, pls. 19-20); the other is inscribed as a gift of Cotys I, 383-359 BC (Cat. Montreal 1987, 204, no. 334; Cat. Venice 1989, no. 143/1; Cat. Florence 1997, no. 190; Archibald 1998, 319, pl. 21). Stjanovo (formerly Raduvene): Cat. Montreal 1987, 176, no. 265; Cat. Venice 1989, no. 142/2; Archibald 1998, 320, pl. 28. Rogozen Treasure: Fol et al. 1989, nos. 40-41.
- 98 Galanina 1997, 212.
- 99 Alekseev (2003, 104, n. 69) suggests that most of them were manufactured either at the very beginning of Assurbanipal rule or even during the rule of Assarchadon.
- 100 Galanina 1997, 102.

- 101 Kisel' 2003, 100-103.
- 102 Vakhtina 2000, 57-58.
- 103 Mantsevich 1958a, 196-202; Kisel' 2003, 80-83, 133, no. 41; Alekseev 2003, 382, fig. 10.16.
- 104 Bandurovskij et al. 1998, 148, fig. 41; Bandurovskij & Chernenko 1999, 27; Bandurovskij & Bujnov 2000, 65-66, fig. 541; Kisel' 2003, 81-83, 133, no. 42; Alekseev 2003, 382, fig. 10.15; Chernenko 2004, 95-96, fig. 2.
- 105 Cat. London 2005, 122, no. 120. See also a bronze rhyton with the terminal in the form of the forepart of a bull and allegedly from Syria, now in Berlin (Cat. Berlin 2002, 140-141, no. 40).
 106 Cat. New York 2000, 154-155, no. 94; Cat. Milan 2001, 242, no. 205; Cat. Moscow 2003, 26 (below).
- 107 Gorbunova 1971, 20-23, fig. 5; Cat. Leningrad 1985, 13, no. 1 with bibliography; Vickers & Gill 1994, 130-132, n. 117 with bibliography, fig. 5.20; Cat. Malibu 2007, 219, no. 119.
- 108 A gold one with the protome of a dog: Galanina & Grach 1986, fig. 111; Cat. Bonn 1997, 89-90, no. 17; Vlasova 2001a, 21, fig. 2, 22, 24, fig. 4.1, 25-26, no. 2; Cat. Amsterdam 2004, 51, fig. 25; Cat. Malibu 2007, 219-220, no. 120. A gold rhyton with the terminal in the form of a ram's head: Galanina & Grach 1986, fig. 110; Vlasova 2001a, 22, 24, fig. 4.2, 26, no. 3. A gold and silver rhyton with the terminal in the form of a lion's head: Vlasova 2001a, 22, 24, fig. 4.3, 26, no. 4. On the dating of the burial, see Vlasova, in Cat. Bonn 1997, 89; Vlasova 2001b, 130-131.
- 109 See n. 22.
- 110 See Filow 1934, 39-58. On the dating of the burial, see n. 22.
- 111 See n. 12.
- 112 Ivanov 1975, 14-21; Cat. Saint Louis 1998, 222-225, nos. 173-177; Archibald 1998, 264-265; Cat. Bonn 2004, 195-196, nos. 226a-e; Cat. Paris 2006, 68-78, nos. 12-16.
- 113 A rare exclusion is the find from Smela, see Appendix 1, no. 14. Also, one of the glass scaraboids of the eight found in burial no. 2 of barrow no. 21 near the village of Vishnevoe represents a subject which allows us to consider it as Achaemenid: a man leading a loaded donkey (Boltrik & Fialko 2007, 82-84, fig. 10.5). Cf. a gold plaque showing a Bactrian leading a camel from Takhti Sangin (Litvinsky & Pichikyan 1995, 196-220).
- 114 A finger ring with an image of a flying duck, late fifth to early fourth century BC (State Hermitage, inv. Дн 1863 I/182; Nikulina 1994, fig. 64). A finger ring with an image of a standing bull, first half of the fourth century BC (State Hermitage, inv. Дн 1863 I/384; Nikulina 1994, fig. 215). A finger ring with an image of a dog gnawing a bone, first half of the fourth century BC (State Hermitage, inv. Дн 1863 I/385; Nikulina 1994, fig. 271). Also found there was a cut-off chalcedony scaraboid with an image of a double-headed capricorn of east Greek workmanship, first half of the fourth century BC (Moscow, State Historical Museum, inv. 44615; Nikulina 1994, fig. 301).
- 115 Cat. London 2005, 189.
- 116 Reinach 1892, pl. XVI, 10; Boardman 1970, pl. 1.5; Nikulina 1994, fig. 447; Boardman 2000, 166-167, fig. 5.27; Boardman 2001, 351, pl. 834; Cat. St Petersburg 2004, 31, no. 12.
- 117 Özgen & Öztürk 1996, 140, no. 95.
- 118 Özgen & Öztürk 1996, nos. 97-100, 102.
- 119 Curtis 1925, no. 98.

- 120 A pair of omega-shaped bracelets with gazelles' heads (Khoshtaria et al. 1972, 115, fig. 49; Chkonia 1981, 144-145, no. 54, pl. 27; Dshawachischwili & Abramischwili 1986, 22 (below); Rehm 1992, 66, no. A.91, fig. 35; Lordkipanidze 1995, 372, col. pl. V.2; Cat. Saarbrücken 1995, 130, fig. 123, 298, no. 276; Cat. Berlin 2007, 47). Omega-shaped bracelet with the hoop of rectangular section and lion-head terminals (Khoshtaria et al. 1972, 115, fig. 50; Chkonia 1981, 144-145, no. 55, pl. 28; Rehm 1993, 105-106, pl. 17.1; Lordkipanidze 1995, 372, col. pl. V.1 (above); Cat. Saarbrücken 1995, 149, fig. 148 (above), 298, no. 277; Knauss 2006, 85, fig. 4 (left); Cat. Berlin 2007, 48). Omega-shaped bracelet with the hoop of rectangular section and bull-head terminals (Khoshtaria et al. 1972, 115, fig. 50; Chkonia 1981, 144-145, no. 56, pl. 28; Rehm 1993, 106, pl. 17.2; Cat. Saarbrücken 1995, 149, fig. 148 (below), 298, no. 277; Lordkipanidze 1995, 372, col. pl. V.1 (below); Knauss 2006, 85, fig. 4 (right); Cat. Berlin 2007, 49). The shapes and the rectangular sections of the two latter bracelets are comparable with the finds from Corinthian Isthmus (Rehm 1992, 47, no. I.7; Koch 1992, 220, pl. 26; Rehm 1993, 105, pl. 16) and from Ikiztepe in eastern Lydia (Özgen & Öztürk 1996, 178-179, no. 130; Mericboyu 2001, 96-97).
- 121 Chkonia 1981, 40-46, 144, 151, pl. 24, no. 49; Lordkipanidze 1991, pl. 53.1a; Lordkipanidze 1995, 379, col. pl. VI.1-2; Rehm 1993, 107, pl. 17.4-5; Dshawachischwili & Abramischwili 1986, 21; Boardman 2000, 196-197, fig. 5.80; Boardman 2002, 19-22; Cat. Berlin 2007, 46.
- 122 Gamkrelidze 1998, 211-216; Knauss 1999, 218-222; Knauss 2006, 82, 84, fig. 3.
- 123 Tsetskhladze 1993/1994, 31; Braund 1994, 122-127. On the problem of the borders of Achaemenid satrapies in the Trans-Caucasian area see, for example, Lordkipanidze 2000, 11; Lordkipanidze 2001, 182-185; Jacobs 2000, 93-102; Ter-Martirosov 2000, 243-252.
- 124 It was originally dated by Ya.I. Smirnov within the frame of the sixth to fourth century BC; cf. Lordkipanidze 2001, 182: late fourth to early third century BC; cf. Lordkipanidze 1989, 323, n. 13; Lordkipanidze 1994, 153, n, 40: second half of the fourth or early third century BC. On the silver phialae from Akhalgori, see Smirnov 1934, 44-47, nos. 61-65, pls. VIII-XII; Luschey 1939, 61, nos. EB4-5; Abka'i-Khavari 1988, 106, nos. F1c14-15, 117-118, fig. 2; Lordkipanidze 2001, 166-171, figs. 8-11; Knauss 2006, 81-82, fig. 1. On the earrings with horse pendants, see n. 72.
- 125 Uvarova 1900, 139-155; Tallgren 1930, 109-182. See especially a fifth century BC silver phiale with an Aramaic inscription, allegedly of Asia Minor production (Uvarova 1900, 140, fig. 119; Smirnov 1909, pl. 3, no. 13; Tallgren 1930, 116-118, no. 1, fig. 4; Luschey 1939, 61, no. EB3; Abka'i-Khavari 1988, 106, no. F1c16; 117-118, fig. 2; Boardman 2000, 191-192, fig. 5.73, 247, n. 133 with bibliography; Lordkipanidze 2001, 168, n. 101.
- 126 Dzhavakhishvili 2007, 117-128.
- 127 Arakelyan 1971, 143-158; Lukonin 1977, 72 (ill.), 76 (ill.), 80 (ill.); Dandamaev & Lukonin 1989, 262-264, figs. 30-31a-b; Cat. Nantes 1996, 197-201, nos. 181-183; Hacatrian & Markarian 2003, 9-20; Khachatrjan & Margarjan 2003, 114-122. On a rhyton with a bull protome of possible Asia Minor manufacture, see also Pfrommer 1983, 270-271, figs. 34-35, 279; Summerer 2006, 135-143, pls. 1.2, 2.2. J. Boardman (2000, 187, fig. 5.68) compares the style of the latter with that of Greco-Persian seals.
- 128 Tiratsjan 1968, 190-198, fig. 1; Abrahamian 1983, fig. 11; Cat. Nantes 1996, 196, no. 180 with bibliography; Boardman 2000, 194.

- 129 Total of five vessels: three from cache no. 2 in barrow no. 1; one from cache no. 1 in the same barrow; and one from barrow no. 4.
- 130 Total of three vessels: two from barrow no. 1; and one from barrow B.
- 131 See n. 49.
- 132 Savel'eva & Smirnov 1972, 115, fig. 5.
- 133 Cat. New York 2000, 152-153, no. 93; Cat. Milan 2001, 240-241, no. 204; Cat. Moscow 2003, 18 above; Treister 2008, 160-162, fig. 7.
- 134 Cat. Vienna 2000, 200, 204-205, no. 116.
- 135 It is maintained that originally the treasure consisted of ca. 360 silver vessels, some of which found their way to different museums in Iran. Several pieces are in the Miho Museum, two vessels are in the Louvre and one is in the Metropolitan Museum. Individual pieces have been sold at auction: by Sotheby's (1996) and Christie's (1999) in New York; and Bonhams in London (2003). A considerable part of the treasure is most probably kept in the collection of H. Mahboubian (London) and has been published by the owner (Mahboubian 1995). On the Western Cave Treasure, see, for example, Van Rijn; Muhly 2004.
- 136 Jablonskij & Meshcherjakov 2007, 57, fig. 3, col. pl. 1; Cat. Orenburg 2008, 90, no. 5; Yablonsky 2007, 88, 93, fig. 7; Balakhvantsev & Jablonskij 2008, 29-38; Treister 2008, 158-160, fig. 6.
- 137 See n. 37.
- 138 See n. 37.
- 139 See n. 37.
- 140 See n. 40.
- 141 Filow 1934, 200, fig. 212; Reade 1986, 80, no. 24, pl. II; Cat. London 2005, 125, no. 129.
- 142 In contrast to the vessels shown in the hands of the Lydians, which demonstrate vertical fluting on the body and rim, decorated with a pearl pattern at the junction of the body and the neck (Ghirshman 1964, 174, fig. 220; Calmeyer 1993, 152-153, pl. 44 (above); Cat. London 2005, 106, fig. 46; Cat. Speyer 2006, 132, fig. 7), the amphora-rhyta in the hands of the Armenians have undecorated bodies (Ghirshman 1964, 176, fig. 222; Luschey 1983, 314-315, pl. 59.1; Calmeyer 1993, 153, pl. 43 (below left); von Gall 1999, 158, fig. 9; Boardman 2000, 188, fig. 5.69; Summerer 2003, 33; Cat. Speyer 2006, 198, fig. 5). Thus, it may be maintained that the reliefs from Persepolis could reflect the regional peculiarities of the decoration of the vessels, and that the vessel from Filippovka demonstrates clear parallels with the vessels held by the members of the Lydian delegation.
- 143 Cat. New York 2000, 156, no. 95; Cat. Milan 2001, 243, no. 206; Cat. Moscow 2003, 27 (below); Treister 2008, 162-163.
- 144 Miller 1993, 126, pl. 29.1; Platz-Horster 2005, 299-300, figs. 9-10; Cat. Speyer 2006, 183.
- 145 Pfrommer 1985, 14-16, figs. 6-9; Pfrommer 1987, 86-91, pls. 60-61; Pfrommer 1990a, 207-208, pl. 43.
- 146 See, in general, Archibald 1998, 266-267, fig. 11.7. See, for example, on the jugs from the Rogozen Treasure (Fol et al. 1989, nos. 145-149; Cat. Bonn 2004, 294, nos. 251-52); on the jug from the barrow near Rosovets (Filow 1934, 170, pl. XI.1; Luschey 1983, 328, B19, fig. 62.4 Luschey considers the shape of the vessel to be Achaemenid; Cat. Bonn 2004, 232, no. 238a); on the jug from Kirklareli (Pfrommer 1985, 14-15, fig. 6). See also a silver jug from a set of silverware of the second half

- of the fourth century BC in the Fleischman Collection (Cat. Malibu 1994, 75-76, no. 31B).
- 147 Cat. Toledo 1977, 42, no. 12.
- 148 Fol et al. 1989, nos. 82, 97; Cat. Saint Louis 1998, 156, nos. 85-86.
- 149 Fol et al. 1989, nos. 145-149; Cat. Bonn 2004, 294, nos. 251-52
- 150 Cat. New York 2000, 154-155, no. 94; Cat. Milan 2001, 242, no. 205; Cat. Moscow 2003, 26 (below); Treister 2008, 163-164, fig. 8.
- 151 See n. 12.
- 152 Cat. New York 2000, 88-89, no. 19; Cat. Milan 2001, 191, no. 130; Cat. Moscow 2003, 15 (above); Treister 2008, 164.
- 153 Özgen & Öztürk 1996, 108, no. 63.
- 154 Özgen & Öztürk 1996, 133, no. 88.
- 155 Moorey 1988, 231-246.
- 156 See the silver-and-gold greaves from Mogilanska Mogila near Vratsa (Cat. Saint Louis 1998, 159, no. 89) and from Agighiol (Cat. Frankfurt 1994, 162, no. 49.3), and a head-shaped vase from Mastjugino barrow (Mantsevich 1958b, 317-333).
- 157 Treister 2009 a; Treister 2009 b.
- 158 Rostovtsev 1918, 6, no. 7, pl. I.2; Rostovtzeff 1922, 123, pl. 24.1 (below); Ebert 1927/1928, 317, pl. 112Ac; Luschey 1939, 43, no. GB 25; Iessen 1952, 217-218, fig. 9; Savel'eva & Smirnov 1972, 119; Abka'i-Khavari 1988, 107, 110, 125-126, no. F3c16; Mordvintseva 1996, 156, fig. 1 (below); Berlizov 1997, 105, fig. 6; Cat. Mantua 1998, no. 456; Zuev 2000, 309, 314-317, pl. III.1-3; Zuev 2003, 21-22, pl. 11; Livshits 2001, 161 (with erroneous information that the phiale was stolen from the Museum of Kazakhstan), 162 (ill.); Livshits & Zuev 2004, 4, fig. 2; Treister 2008, 146-155, figs. 3-4. On the inscription, see Livshits 2001, 162 (below); Livshits & Zuev 2004, 10; cf. Meshcherjakov et al. 2006, 112-113 with the dating of the burial not later than the third century BC.
- Rostovtsev 1918, 6, no. 7, pl. I.1; Rostovtzeff 1922, 123, pl. 24.1 (above); Schefold 1938, 13; Luschey 1939, 61, no. EB7, 72-73; Iessen 1952, 217-218, fig. 10; Savel'eva & Smirnov 1972, 119; Pfrommer 1987, 98, nn. 582-583, 158; Abka'i-Khavari 1988, 107, 108, 125-126, no. F3c17; Mordvintseva 1996, 156, fig. 1 (above); Berlizov 1997, 105, fig. 7; Zuev 2000, 309, 314-317, pl. IV.1-2; Zuev 2003, 21-22, pl. 8; Livshits 2001, 163 (ill.); Livshits & Zuev 2004, 4, fig. 1; Treister 2008, 146-155, figs. 1-2. On the inscription, see Livshits 2001, 163 (below); Livshits & Zuev 2004.
- 160 Balakhvantsev & Jablonskij 2006, 98-106; Treister 2008, 155-158, fig. 5.
- 161 Treister 2008, 158; Treister 2009 a.
- 162 Pfrommer 1987, 56-61, 234-236, nos. KaB M1-16; Archibald 1989, 14; Archibald 1998, 169-170; Zimmermann 1998, 36-42, 160-161, nos. BM 1-19.
- 163 From the late fourth century BC burial in Buccino near Salerno (Cat. Paestum 1996, no. 37.37; Cipriani et al. 1996, 21; Cat. Trieste 2002, 260-261, no. 88.27.
- 164 From the treasure of the second half of the fourth century BC found near Vurbitsa in the Shumen region (Filow 1934, 173, fig. 189; Pfrommer 1987, 70, 232, no. KaB H 15; Cat. Cologne 1979, no. 317; Cat. Montreal 1987, no. 365; Cat. Venice 1989, 185, no. 147.1, 193 (ill.); Archibald 1989, 13-14, fig. 1Bf; Cat. Florence 1997. no. 98; Archibald 1998, 270-271, fig. 11.10-11, pl. 33; Zimmermann 1998, 37-40, 161, no. BM 18.
- 165 Treister 2008, 157-158; Treister 2009 b.
- 166 Jablonskij & Meshcherjakov 2007, 58, fig. 5, col. pl. 1; Cat. Orenburg 2008, 81, no. 2.

- 167 Jablonskij & Meshcherjakov 2007, 57-58, fig. 4, col. pl. 2; Yablonsky 2007, 89, 95, fig. 9; Cat. Orenburg 2008, 88-89, no. 14.
- 168 Dalton 1964, 37, nos. 136-137, pl. XX.
- 169 Savel'eva & Smirnov 1972, 115-116, fig. 6; Smirnov & Popov 1972, 221 (ill.).
- 170 See n. 167.
- 171 Dalton 1964, no. 136, pl. XX; Rehm 1992, 80, 86, no. C4, fig. 59.
- 172 Rehm 1992, 79, 86, no. C3, fig. 58.
- 173 Akurgal 1961, 173, fig. 117; Pfrommer 1990b, 342, no. TA 121; Rehm 1992, 43-44, 70, no. A.117, fig. 52.
- 174 Dalton 1964, no. 116, pl. I; Pfrommer 1990b, 341, no. TA 116; Koch 1992, 220, 222, pl. 27; Rehm 1992, 44-47, 70, no. A.118, fig. 53; Cat. London 2005, 138-139, no. 153. See also the same modelling of hindquarters on the bracelet with terminals in the form of winged goats from the Oxus Treasure (Dalton 1964, no. 137, pl. XX; Cat. London 2005, 142-143, no. 168).
- 175 See, for example, a gold torque from the burial on the acropolis of Susa (Cat. New York 1992, 245-246, no. 171; Cat. London 2005, 174-175, no. 270). Gold torque or bracelets from the Oxus Treasure (Dalton 1964, nos. 117-118, 125, fig. 65, pl. XVII; Cat. London 2005, 139, nos. 154-156).
- 176 Rostovtsev 1918, 21, pl. VI.10-12; Iessen 1952, 217, fig. 8; Savel'eva & Smirnov 1972, 119; Cat. Mantua 1998, no. 259.
- 177 Balakhvantsev & Jablonskij 2007, 145, figs. 2-3; Cat. Orenburg 2008, 131, no. 113.
- 178 Ankara, Museum of Anatolian Civilizations, inv. 15124 (Bingöl 1999, 136, no. 147). Bingöl compares the image with that on the Achaemenid bulla from Daskyleion (Akurgal 1961, 174, fig. 123). See also a contour gold plaque from the Oxus Treasure (Dalton 1964, no. 38, pl. XIII).
- 179 Ivanov et al. 1984, 20, no. 17, fig. 21; Dandamaev & Lukonin 1989, 267, fig. 35; Rehm 1992, 125, 138, no. E.84, 400, fig. 92.
- 180 Cat. Vienna 1999, 65-67, no. 28; Cat. Miho 2002, no. 33; Bernard & Inagaki 2000, 1371-1437; Bernard & Inagaki 2002, 207-210.
- 181 Ghirshman 1964, fig. 332; Zahn 1967 [add to bibliography], 18-19, fig. 3; Cat. New York 1992, no. 178; Rehm 1992, 154, 171 F.106, fig. 132; Cat. London 2005, 174-175, no. 269.
- 182 Cat. Berlin 1978, no. 178; Musche 1992, 271-272, type 6.2.2; Rehm 1992, 148, 169, F.93, fig. 120; The Metropolitan Museum of Art Bulletin, Spring 1992. Ancient Art. Gifts from the Norbert Schimmel Collection, XLIX, 4, 18, inv. 1989.281.33; Koch 1992, 222, pl. 32.
- 183 See Cat. New York 1992, 242; Cat. London 2005, 174.
- 184 Elayi & Elayi 1992, 265-270.
- 185 Cat. Orenburg 2008, 99, no. 42.
- 186 Sevinç et al. 1998, 312, figs. 8-9, 320, no. 17.
- 187 See, for example, a rhyton from the former N. Schimmel Collection in the Metropolitan Museum of Art; see n. 14.
- 188 See nn. 22, 37-40, 136 (except for the vessel in the Pomerance Collection). See also the handles of the gold vessel from Filippovka (see n. 133) and a silver handle from a treasure found at Babylon (see n. 141).
- 189 See, for example, the gold omega-shaped bracelets from Filippovka burial no. 4 barrow no. 4/2006 (see n. 167); the gold torque from the same burial (see n. 166); on the gold bracelets with lion-griffin terminals from Dağ Kizilca Köyü near Manisa, see n. 173; and from the Oxus Treasure, see n. 174.

- 190 See the sculpted handles in the form of ibexes in Berlin and Paris (see nn. 19-20); a silver-gilt vessel in a private collection (Ghirshman 1964, 254-255, fig. 307); a silver handle in the form of a stag from the Siberian Collection (Rudenko 1962, 54, pl. XII, 1; Ivanov et al. 1984, 20, no. 18, fig. 12).
- 191 Cat. New York 2000, 80-81, nos. 5-6; Cat. Orenburg 2008, 86, no. 9, 98, nos. 39-40, 118, no. 84.
- 192 Akishev 1978, 105, pl. 24 (right).
- 193 Čugunov et al. 2006, pl. 26, 121, no. 13.
- 194 Čugunov et al. 2006, pls. 31-32, 123-124, no. 16.
- 195 Treister 2007, fig. 4. See, in detail, Treister 2009 a.
- 196 See n. 136.
- 197 Alekseyev 2005, 54; Alekseev 2006, 166; Alekseev 2007, 254.
- 198 Chernenko 1984, 50.
- 199 Vlasova 2001b, 130. On the inscription from the Seven Brothers settlement (ancient Labrys) suggesting that the settlement was a capital of the Sindian Kingdom, see Tokhtas'ev 2006, 1-62 with bibliography.
- 200 Treister 1982, 71, fig. 2 (the distribution map); Treister 1985, 126-139. See also new finds in the vicinity of Phanagoria (Limberis & Marchenko 2007, 235) and in the Kuban area (Tenginskaya: Beglova 2002, 303, fig. 8.1). Against my interpretation as diplomatic gifts, see most recently Limberis & Marchenko 2007, 235. In favour of my suggestion, see Archibald 2004, 11; Ladynin 2007, 235-252 with bibliography.
- 201 Savel'eva & Smirnov 1972, 106-113, figs. 2-3; Savelyeva 1973; Schmitt 2001, 197, no. 8 with bibliography.
- 202 Schmitt 2001, 199.
- 203 Balakhvantsev & Jablonskij 2008, 37.
- 204 Savel'eva & Smirnov 1972, 110, 118, fig. 7; Savelyeva 1973, 5.
- 205 Balakhvantsev & Jablonskij 2007, 147.
- 206 Berlizov 1997, 103.
- 207 Cf. Vogelsang 1992, 223.
- 208 Balakhvantsev & Jablonskij 2006, 105.
- 209 This is a preliminary list, which is based only on the published materials. Also, the information on the burial complexes is not complete. Despite numerous requests to the curators of the Antiquities Department of the State Hermitage Museum, I have not received the desired information about the contexts of some finds, about which there is no data in the literature.
- 210 Vlasova 2001b, 131.

Bibliography

Abka'i-Khavari, M. 1988. Die achämenidischen Metallschallen, *AMI* 21, 91-137. Abrahamian, V.A. 1983. *Armenian Jewelry Art from Ancient Times to Present Day.* Yerevan.

Akishev, A.K. 1978. Kurgan Issyk. Leningrad.

Akurgal, E. 1961. Die Kunst Anatoliens von Homer bis Alexander. Berlin.

Alekseev, A.Ju. 1993. Unikal'nye ukrashenija konskoj uzdy iz Aleksandropol'skogo Kurgana, *Peterburgskij arkheologicheskij vestnik* 6, 72-75.

Alekseev, A.Ju. 1984. Rukojat' paradnogo achemenidskogo mecha iz Chertomlytskogo kurgana, *SoobErmit* 49, 38-41.

- Alekseev, A. Ju. 2003. Chronografija erropejskoj skifii. St. Petersburg.
- Alekseyev [Alekseev], A. 2005. Scythian kings and "Royal" burial-mounds of the fifth and fourth centuries BC, in: D. Braund (ed.), Scythians and Greeks. Cultural Interactions in Scythia, Athens and the Early Roman Empire (Sixth Century BC First Century AD). Exeter, 39-55.
- Alekseev, A. 2006. Scythian kings and "Royal Barrows" of the fifth and fourth centuries BC: modern chronology and interpretation, in: J. Aruz, A. Farkas & E. Valtz Fino (eds.), *The Golden Deer of Eurasia. Perspectives on the Steppe Nomads of the Ancient World. The Metropolitan Museum of Art Symposia.* New York-New Haven-London, 160-167.
- Alekseev, A. 2007. Skythische Könige und Fürstenkurgane, in: *Im Zeichen des goldenen Greifen. Königsgräber der Skythen*. Munich-Berlin-London-New York, 242-255.
- Alekseev, A.Ju., V.Ju. Murzin & R. Rolle 1991. Čertomlyk. Skifskij carskij kurgan IV v. do n.e. Kiev.
- Alekseeva, E.M. 1975. *Antičnye busy Severnogo Pričernomor'ja* 1 (Archeologija SSSR. SAI, G1-12). Moscow.
- Amandry, P. 1959. Toreutique achéménide, AntK 2, 38-56.
- Anfimov, N.V. 1966. Kompleks bronzovych predmetov iz kurgana bliz st. Temižbekskoj, in: A.I. Boltunova (ed.), *Kul'tura antičnogo mira*. Moscow, 19-23.
- Anfimov, N.V. 1987. Drevnee zoloto Kubani. Krasnodar.
- Anokhin, V.A. 1986. Monetnoe delo Bospora. Kiev.
- Antikenmuseum Berlin 1988. W.-D. Heilmeyer (ed.), *Antikenmuseum Berlin. Die ausgestellten Werken*. Berlin.
- Arakelyan, B.N. 1971. Klad serebrjannych izdelij iz Erebuni, SovA 1, 143-158.
- Archibald, Z.H. 1989. Thracian interpretations of Greek and Oriental elements in fourth-century metalwork, in: B.F. Cook (ed.), *The Rogozen Treasure*. *Papers of the Anglo-Bulgarian Conference*, 12 March 1987. London, 12-25.
- Archibald, Z.H. 1998. The Odryssian Kingdom of Thrace. Orpheus Unmasked. Oxford.
- Archibald, Z.H. 2004. In-groups and out-groups in the Pontic cities of the Hellenistic age, in: C. Tuplin (ed.), *Pontus and the Outside World. Studies in Black Sea History, Historiography and Archaeology* (Colloquia Pontica 9). Leiden-Boston-Cologne, 1-16.
- Artamonow, M.I. 1970. Goldschatz der Skythen. Prague.
- Balakhvantsev, A.S. & L.T. Jablonskij 2006. Serebryannaja čaša iz Prochorovki, *RossA* 1, 98-106.
- Balakhvantsev, A.S. & L.T. Jablonskij 2007. Achemenidskaja emal' iz Filippovki (problema chronologii pamjatnika), *RossA* 1, 143-149.
- Balakhvantsev, A.S. & L.T. Jablonskij 2008. Serebrjannaja amfora iz Filippovki, in: L.T. Jablonskij (ed.), Rannie kochevniki Volgo-Ural'skogo regiona. Materialy meždunarodnoj naučnoj konferentsii "Rannie kočevniki Južnogo Priural'ya v svete noveišich archeologičeskich otkrytij", 21-25 aprely 2008. Orenburg, 29-38.

- Bandurovskij, A.V. & Ju.V. Bujnov 2000. Kurgany skifskogo vremeni (severskodonetskij variant). Kiev.
- Bandurovskij, A.V., Ju.V. Bujnov & A.K. Degtjar' 1998. Novye issledovanija kurganov skifskogo vremeni v okrestnostjach g. Ljubotina, in: B.A. Shramko (ed.), *Ljubotinskoe gorodišče*. Khar'kov, 143-182.
- Bandurovskij, A.V. & E.V. Chernenko 1999. Achemenidskie vešči iz Ljubotinskogo mogil'nika, in: P.P. Tolochko (ed.), *Problemy skifo-sarmatskoj archeologii Severnogo Pričernomor'ja (k 100-letiju B. N. Grakova). III Grakovskie čtenija.* Zaporozh'e, 27-30.
- Beglova, J. 2002. Kopflos und gefesselt Bestattungen der ganz anderen Art. Ein Ritualkomplex mit menschlischen Opfergaben aus der Grabstätte von Tenginskaja, AW 3, 297-304.
- Berlizov, N.E. 1997: interpretatsii achemenidskogo importa v ranneprochorovskich Pogrebenijach, in: *Stratum+Peterburgskij archeologičskiī vestnik*. St Petersburg-Kishinev, 101-105.
- Bernard, P. & H. Inagaki 2000. Un torque achéménide avec une inscription grecque au Musée Miho (Japan), *CRAI* 2000, 1371-1437.
- Bernard, P. & H. Inagaki 2002. Un torque achéménide avec une inscription grecque au Musée Miho (Japan), in: Cat. Miho 2002, 207-210.
- Bidzilja, V.I. 1971. Doslidžennja Gajmanovoj Mogili, ArcheologijaKiiv 1, 44-56.
- Bill, A. 2003. Studien zu den Gräbern des 6. bis 1. Jahrhinderts v. Chr. in Georgien unter besonderer Berücksichtigung der Beziehungen zu den Steppenvölkern (Universitätsforschungen zur prähistorischen Archäologie 96). Bonn.
- Bingöl, F.R.I. 1999. Anadolu Medenizetleri Müzesi. Antik Takilar. Ankara.
- Boardman, J. 1970. Pyramidal stamp seals in the Persian Empire, Iran 8, 19-46.
- Boardman, J. 1994. The Diffusion of Classical Art in Antiquity. London.
- Boardman, J. 2000. Persia and the West. London.
- Boardman, J. 2001. Greek Gems and Finger Rings.² London.
- Boardman, J. 2002. A jewel from Vani, in: D. Kacharava, M. Faudot & E. Geny (eds.), *Autour de la Mer Noire. Hommage à Otar Lordkipanidzé*. Paris, 19-22.
- Bobrinskij, A. 1887. Kurgany i slučajnye archeologičeskie nachodki bliz mestečka Smely. V. 1. St Petersburg.
- Boltrik, Ju.V. & E.E. Fialko 2007. Ukrašenija iz skifskich pogrebal'nych kompleksov Rogačikskogo kurgannogo polja, *Starožitnosti stepovogo Pričornomor'ja i Krimu* 15, 51-93.
- von Bothmer, D. 1984. *A Greek and Roman Treasury* (Bulletin of the Metropolitan Museum of Art 42/1). New York.
- Braund, D. 1994. *Georgia in Antiquity. A History of Colchis and Transcaucasian Iberia* 550 BC AD 562. Oxford.
- Brentjes, B. 1967. Studien zur Glyptik Altkaukasiens und der nördlichen Schwarzmeergebiets, Wissenschaftliche Zeitschrift der Universität Halle 16, 233-262.
- Burachkov, P. 1884 Obščij katalog monet prinadležaščich ellinskim kolonijam v predelach nynečnej južnoj Rossii. Odessa.

- Calmeyer, P. 1993. Die Gefäße auf den Gabenbringer-Reliefs in Persepolis, *AMI* 26, 147-160.
- Cat. Amsterdam 2004. Kalashnik, Yu., Greek Gold. From the Treasure Rooms of the Hermitage. Zwolle.
- Cat. Berlin 1978. J. Settgast & U. Gehrig (eds.), Von Troia bis Amarna: The Norbert Schimmel Collection. New York-Mainz.
- Cat. Berlin 1996. Faszination der Antike. The George Ortiz Collection. Berlin.
- Cat. Berlin 2002. F. Zimmer (ed.), *Die griechische Klassik. Idee oder Wirklichkeit*. Mainz.
- Cat. Berlin 2007. Medeas Gold. Neue Funde aus Georgien. Katalog zur Ausstellung des Georgischen Nationalmuseums, Tiflis und der Antikensammlung, Staatlichen Museen zu Berlin vom 15. März bis 3. Juni 2007 im Altem Museum. Tbilisi.
- Cat. Bonn 1997. L. Barkova & Ju. Kalašnik (eds.), Zwei Gesichter der Eremitage. Die Skythen und ihr Gold. Bonn.
- Cat. Bonn 2004. R. Echt (ed.), Die Thraker. Das goldene Reich des Orpheus. Bonn.
- Cat. Brooklyn 1966. The Pommerance Collection of Ancient Art. Catalogue of the Exhibition Held at the Brooklyn Museum. New York.
- Cat. Cologne 1979. Gold der Thraker. Archäologische Schätze aus Bulgarien. Mainz.
- Cat. Florence 1997. R. Berti & E. La Porta (eds.), *Glorie di Tracia. L'oro più antico i tesori i miti.* Florence.
- Cat. Frankfurt 1994. B. Deppert-Lippitz & W. Meier-Arendt (eds.), Goldhelm. Schwert und Silberschätze. Reichtümer aus 6000 Jahren rumänischer Vergangenheit. Frankfurt.
- Cat. Hamburg 1993. R. Busch (ed.), *Gold der Skythen. Schätze aus der Staatlichen Eremitage St Petersburg.* Neumünster.
- Cat. Leningrad 1985. N. Grach (ed.), *Antičnoe chudožestvennoe serebro* (exhibition catalogue). Leningrad.
- Cat. London 1994. G. Ortiz, In Pursuit of the Absolute. Art of the Ancient World from the George Ortiz Collection (Royal Academy of Arts). London-Bern.
- Cat. London 2005. J. Curtis & N. Tallis (eds.), Forgotten Empire. The World of Ancient Persia. London.
- Cat. Malibu 1994. J. Harris (ed.), A Passion for Antiquities. Ancient Art from the Collection of Barbara and Lawrence Fleischman. Malibu.
- Cat. Malibu 2007. A.A. Trofimova (ed.), *Greeks on the Black Sea. Ancient Art from the Hermitage.* Los Angeles.
- Cat. Mantua 1998. G.A. Popescu, C.S. Antonini & K. Baipakov (eds.), L'uomo d'oro. La cultura delle steppe del Kazakhstan dall'età del bronzo alle grandi migrazioni. Venice.
- Cat. Miho 2002. Treasures of Ancient Bactria. Miho Museum. Miho.
- Cat. Milan 2001. J. Aruz, A. Farkas, A. Alekseev & E. Korolkova (eds.), Oro. Il misterio dei Sarmati e de gli Sciti. Milan.
- Cat. Montreal 1987. Gold of the Thracian Horsemen. Treasures from Bulgaria. Montreal.

- Cat. Moscow 2003. R.G. Kuzeev, M.B. Piotrovskij & A.I. Shkurko (eds.), *Zolotye oleni Evrazii*. St Petersburg.
- Cat. Nantes 1996. J. Santrot (ed.), Arménie. Trésors de l'Arménie ancienne des origines au IVe siècle. Paris.
- Cat. New York 1975. *From the Lands of the Scythians* (Bulletin of the Metropolitan Museum of Art 32.5, 1973/1974). New York.
- Cat. New York 1992. P.O. Harper, J. Aruz & F.Tallon (eds.), *The Royal City of Susa. Ancient Near Eastern Treasures in the Louvre.* New York.
- Cat. New York 2000. J. Aruz, A. Farkas, A. Alekseev & E. Korolkova (eds.), The Golden Deer of Eurasia. Scythian and Sarmatian Treasures from the Russian Steppes. New York.
- Cat. Orenburg 2008. L.T. Jablonskij (ed.), *Sokrovišča sarmatskich voždej (Materialy raskopok Filippovskich kurganov)*. Orenburg.
- Cat. Paestum 1996. M. Cipriani & F. Longo (eds.), I Breci in Occidente. Poseidonia e i Lucani. Naples.
- Cat. Paris 1961. Septe mille ans d'art en Iran. Petit Palais. Paris.
- Cat. Paris 2006. L'or des Thraces. Trèsors de Bulgarie. Musée Jacquemart-André. Paris.
- Cat. Saarbrücken 1995: A. Miron & W. Orthmann (eds.), *Unterwegs zum goldenen Vlies. Archäologische Funde aus Georgien*. Saarbrücken.
- Cat. Saint Louis 1998. I. Marazov (ed.), Ancient Gold: The Wealth of the Thracians. Treasures from the Republic of Bulgaria. New York.
- Cat. Speyer 2006: *Pracht und Prunk der Grosskönige. Das persische Weltreich* (Historisches Museum der Pfalz Speyer). Stuttgart.
- Cat. St Petersburg 1993. G. Ortiz, Antiquities from Ur to Byzantium. The George Ortiz Collection. Bern.
- Cat. St Petersburg 1999. S.P. Boriskovskaja (ed.), *Drevnij gorod Nimfej* (exhibition catalogue). St Petersburg.
- Cat. St Petersburg 2004. M.B. Piotrovskij (ed.), *Iran v Ermitaže. Formirovanie kollekcij.* St Petersburg.
- Cat. St Petersburg 2007. A.A. Trofimova (ed.), *Aleksandr Velikij. Put' na Vostok.* St Petersburg.
- Cat. Toledo 1977. A. Oliver Jr., Silver for the Gods. 800 Years of Greek and Roman Silver. Toledo.
- Cat. Trieste 2002. A. Giumlia-Mair & M. Rubinich (eds.), Le arti di Efesto. Capolavori in metallo dalla Magna Grecia. Trieste.
- Cat. Venice 1989. *Traci. Arte e cultura nelle terre di Bulgaria dalle origini alla tarda romanità*. Milan.
- Cat. Vienna 1999. W. Seipel (ed.), Schätze des Orients. Meisterwerke aus dem Miho Museum. Vienna.
- Cat. Vienna 2000. W. Seipel (ed.), 7000 Jahre persische Kunst. Meisterwerke aus dem Iranischen Nationalmuseum in Teheran. Milan.
- Cat. Zurich 1993. M. Karabelnik (ed.), Aus den Schatzkammern Eurasiens. Zürich.

- Chernenko, E.V. 1975. Oružie iz Tolstoj mogily, in: A.I. Terenozhkin (ed.), *Skifskij mir.* Kiev, 152-173.
- Chernenko, E.V. 1984. Skifo-persidskaja vojna. Kiev.
- Chernenko, E.V. 2004. Bližnevostočnye sosudy iz Ljubotinskich kurganov na Char'kovščine, in: J. Chochorowski (ed.), *Cimmerians, Scythians, Sarmatians. In Memory of Professor Tadeusz Sulimirski*. Krakow, 93-100.
- Chkonia, A.M. 1977. Zolotye ser'gi ranneellinističeskogo Vremeni iz Vanskogo gorodišča, *Vani* III. Tbilisi, 81-100, 188-189.
- Chkonia, A.M. 1981. *Gold Ornaments from the Ancient City of Vani* (Vani, VI). Tbilisi (in Georgian with summaries in Russian and English).
- Chkonia, A.M. 1990. Zlatokuznečesto drevnej Kolchidy v svete archelogičeskich otkrytij drevnego Vani, in: O.D. Lordkipanidze (ed.), *Pricernomo'e VII-V vv. do n.e.: pis'mennye istočniki i archeologija. Materialy V Meždunarodnogo simpoziuma po drevnej istorii Pričernomor'ja. Vani-1987.* Tbilisi, 290-295.
- Chqonia [Chkonia], A. 1996. Colchian jewelry from the Vani city site, in: A. Calinescu (ed.), *Ancient Jewelry and Archaeology*. Bloomington-Indianapolis, 45-50.
- Čkonia [Chkonia], A. 2002. À propos de l'exportation de l'or colchidienne, in: M. Faudot, A. Fraysse & E. Geny (eds.), *Pont-Euxine et commerce. La gènese de la "route de la soie"*. *Actes du IXe Symposium de Vani (Colchide 1999)*. Paris, 263-272.
- Cipriani, M., E. Greco, F. Longo & A. Pontradolfio 1996. *I Lucania. Paestum*. Paestum.
- Čugonov, K.V., H. Parzinger & A. Nagler 2006. *Der Goldschatz von Aržan. Ein Fürstengrab der Skythezeit in der südsibirischen steppe*. Munich.
- Çokay-Kepçe, S. 2006. *The Karaçalli Necropolis near Antalya* (Adalya Supplemetary Series 4). Antalya.
- Curtis, C.D. 1925. Jewelry and Gold Work I, 1910-1914 (Sardis 13). Rome.
- Dandamaev, M.A. & V.G. Lukonin 1989. *The Culture and Social Institutions of Ancient Iran*. Cambridge-New York-New Rochelle-Melbourne-Sydney.
- Dalton, O.M. 1964. The Treasures of the Oxus.³ London.
- Delemen, I. 2006. An unplundered chamber tomb on Ganos mountain in southeastern Thrace, *AJA* 110, 251-273.
- Dschwachischwili, A. & G. Abramischwili 1986. *Goldschmiedekunst und Toreutik in den Museen Georgiens*. Leningrad.
- Dzhavakhishvili, K. 2007. Achaemenid seals found in Georgia, *AncCivS-cytSib*13/1-2, 117-128.
- Ebert, M. 1927/1928. Prochorovka, in: M. Ebert (ed.), *Reallexikon der Vorgeschichte* 10. Berlin, 317-318.
- Elayi, J., A.G. Elayi 1992. Nouvelle datation d'une tombe achéménide de Suse. *Studia Iranica* 21/2, 265-270.
- Fedoseev, N.F. 1997. Zum achämenidischen Einfluß auf die historische Entwicklung der nordpontischen griechischen Staaten, AMIT 29, 309-319.

- Fedoseev, N.F. 2007. The necropolis of Kul Oba, in: D.V. Grammenos & E.K. Petropolulos (eds.), *Ancient Greek Colonies in the Black Sea* 2. *Vol.* 2 (BAR International Series 1675). Oxford, 979-1022.
- Filow, B. 1934. Die Grabhügelnekropole bei Duvanlij in Südbulgarien. Sofia.
- Finogenova, S.I. 1993. Katalog sobranija antičnych gemm Gosudarstvennogo muzeja izobraziteľ nych iskusstv im. A.S. Puškina. Moscow.
- Fol, A., B. Tsvetkov, G. Mihailov, I. Venedikov & I. Marazov 1989. *The Rogozen Treasure*. Sofia.
- Gagoshidze, Ju.M. 1985. Iz istorii juvelirnogo dela v Gruzii, in: V.G. Lukonin (ed.), Chudožestvennye pamjatniki i problemy kul'tury Vostoka. Leningrad, 47-61.
- Galanina, L.K. 1997. Kelermesskie kurgany. "Carskie" pogrebenija ranneskifskoj epochi. Moscow.
- Galanina, L. & N. Grach 1986. Scythian Art. Leningrad.
- von Gall, H. 1999. Der achämenidische Löwengreif in Kleinasien, AMI 31, 149-160.
- Gamkrelidze, G. 1998. Ein Rhyton mit Götterdarstellung aus der Kolchis, *AMIT* 30, 211-216.
- Ghirshman, R. 1962. Le rhyton en Iran. Notes iraniennes, 11. *ArtAs* 25/1, 57-80. Ghirshman, R. 1964. *Iran. Protoiraner, Meder, Achämeniden*. Munich.
- Gigolashvili, E.G. 1990a. Serebryannye kubki iz Vani, in: O.D.Lordkipanidze (ed.), Pričernomor'e VII-V vv. do n.e.: pis'mennye istočniki i archeologija. Materialy V Meždunarodnogo simpoziuma po drevnej istorii Pričernomor'ja Vani-1987. Tbilisi, 316-320.
- Gigolashvili, E. 1990b. Les coupes en argent de Vani, in: O. Lordkipanidze & P. Lévêquer (eds.), Le Pont-Euxin vu par les Grecs. Sources écrits et archéologique. Symposium de Vani (Colchide) Septembre-Octobre 1987. Paris, 279-281.
- Gorbunova, K.S. 1971. Serebrjannye kiliki s gravirovannymi izobraženijami iz Semibratnikh kurganov, in: K.S. Gorbunova (ed.), *Kul'tura i iskusstvo antichnogo mira*. Leningrad, 18-38.
- Hacatrian, Ž. & A.Z. Markarian 2003. I rhyta di Erebuni nel contesto dell'arte achemenide e greco-persiana, *Parthica* 5, 9-20.
- Iessen, A.I. 1952. Rannie svjazi Priural'ja s Iranom, SovA 16, 206-231.
- Ivanov, A.A., V.G. Lukonin & L.S. Smesova 1984. *Juvelirnye izdelija Vostoka.* Drevnij, srednevekovyj periody. Kollekcija Osoboj kladovoj otdela Vostoka Gosudarstvennogo Ermitaža. Moscow.
- Ivanov, D. 1975. Sreburnoto Sukrovisče ot s. Borovo. *Izkustvo* 25/3-4, 14-21.
- Jablonskij, L.T. & D.V. Meshcherjakov 2007. Raskopki "carskogo" kurgana v Filippovke (predvaritel'noe soobščenie), *RossA* 2, 55-62.
- Jacobs, B. 2000. Achaimenidenherrschaft in der Kaukasus-Region und in Cis-Kaukasien, *AMIT* 32, 93-102.
- Khachatrjan, Zh. & A.G. Margarjan 2003. Riton so skul'pturnoj protomoj v vide vsadnika, *VDI* 4, 114-122.

- Khoshtaria, N.V., R.V. Puturidze & A.M. Chkonia 1972. Itogi archeologičeskich rabot, provedennych v 1961-1963 gg. v severo-vostočnoj časti Vanskogo gorodišča, in: *Vani I. Archaeological excavations* 1947-1969. Tbilisi, 111-134 (in Georgian with summary in Russian).
- Kisel', V.A. 2003. Shedevry juvelirov drevnego Vostoka iz skifskikh kurganov. St Petersburg.
- Knauss, F. 1999. Ein silbernes Trinkhorn aus Mtisdziri. Die Kolchis zwischen Achämeniden und Griechen, in: R.F. Docter & E.M. Moormann (eds.), *Proceedings of the 15th International Congress on Classical Archaeology, Amsterdam 12.-17. July 1998.* Amsterdam, 218-222.
- Knauss, F. 2006. Ancient Persia and the Caucasus, IrAnt 41, 79-118.
- Knipovich, T.N. 1926. Greko-persidkie reznye kamni Ermitaža, *Gosudarstven-nyj Ermitaž*. *Sbornik* 3, 41-58.
- Koch, H. 1992. Es kündet Dareios der König... Vom Leben im persischen Großreich. Mainz.
- Korol'kova, E.F. 2003. Kavkazskoe ožerel'e s zern'ju i vozmožnosti ego atribicii, *SoobErmit* 60, 50-55.
- Koshelenko, G.A. 1999. Ob odnom svidetel'stve Diodora o rannej istorii Bosporskogo carstva, in: A.V. Podosinov (ed.), *Drevneishie gosudarstva Vostočnoj Evropy.* 1996-1997. Severnoe Pričernomor'e v antičnosti. Voprosy istočnikovedeniya. Moscow, 130-142.
- Ladynin, I.A. 2007. Eščo raz o perstnjach "ptolemeevskogo tipa" iz Severnogo Pričernomor'ja: k vozmožnoj interpretatsii v svete vnesčnej politiki ellinističeskogo Egipta v III v. do n.e., *Drevnosti Bospora* 11, 235-252.
- Limberis, N.Ju. & I.I. Marchenko 2007. Antičnye pogrebenija iz kurgannogo nekropolja u poselenija "Vinogradnoe 7" v okrestnostjach Fanagorii, in: V.Ju. Zuev (ed.), *The Phenomenon of Bosporan Kingdom: Sacred Meaning of Region, Sites and Objects. Proceedings of the International Conference. Pt. 1.* St Petersburg, 229-236.
- Litvinsky, B.A. 2001. Bactrian ivory plate with hunting scene from Temple of the Oxus, *SilkRoadArtA* 7, 137-166.
- Litvinsky, B.A. & I.R. Pichikyan 1995. Gold plaques from the Oxus Temple (northern Bactria), *AncCivScytSib* 2/2, 196-220.
- Livshits, V.A. 2001. O datirovke nadpisej na serebryannych sosudach iz kurgana 1 u derevni Prochorovka, in: V.Yu. Zuev (ed.), Bosporskij fenomen. Kolonizatsija regiona. Formirovanie polisov. Obrazovanie gosudarstva. Materialy meždunarodnoj konferentsii. Pt. 2. St Petersburg, 160-170.
- Livshits, V.A. & V.Yu. Zuev 2004. O datirovke parfyanskich nadpisej na fialach iz kurgana 1 u derevni Prochorovka, *VDI* 2, 3-11.
- Lordkipanidze, O.D. 1971. La civilisation de l'ancienne Colchide aux Ve IVe siècles, *RA* 2, 259-288.
- Lordkipanidze, O.D. 1972. Vanskoe gorodišče, in: O. D. Lordkipanidze (ed.), *Vani I. Archaeological Excavations* 1947-1969. Tbilisi, 43-95.
- Lordkipanidze, O.D. 1989. Nasledie drevnej Gruzii. Tbilisi.

- Lordkipanidze, O.D. 1991. *Archäologie in Georgien. Von der Altsteinzeit zum Mittelalter* (Quellen und Forschungen zur prähistorischen und provinzialrömischen Archäologie 5). Weinheim.
- Lordkipanidze, O.D. 1994. Recent discoveries in the field of classical archaeology in Georgia, *AncCivScytSib* 1/2, 127-168.
- Lordkipanidze, O.D.1995: Vani ein antikes religiöses Zentrum im Lande des goldenen Vlieses (Kolchis), *JbRGZM* 42/2, 353-401.
- Lordkipanidze, O.D. 2000. Introduction to the history of Caucasian Iberia and its culture of the Achaemenid and post-Achaemenid periods, *AMIT* 32, 3-20.
- Lordkipanidze, O.D. 2001. The "Akhalgori Hoard". An attempt at dating and historical interpretation, *AMIT* 33, 143-190.
- Lukonin, V.G. 1977. Iskusstvo drevnego Irana. Moscow.
- Luschey, H. 1939. Die Phiale. Bleicherode am Harz.
- Luschey, H. 1983. Thrakien als ein Ort der Begegnung der Kelten mit der iranischen Metallkunst, in: R.M. Boehmer & H. Hauptmann (eds.), Festschrift K. Bittel. Mainz, 313-329.
- Mahboubian, H. 1995. *Treasures of the Mountains. The Art of the Medes*. London. Maksimova, M.I. 1956. Glinjanaja tkackaja podveska s ottiskom pečati, *MatIs-sIA* 50, 190-196.
- Maksimova, M.I. 1979. Artjuchovskij kurgan. Leningrad.
- Mantsevich, A.P. 1958a. Golovka byka iz kurgana VI v. do n.e. na r. Kalitve, *SovA* 2, 196-202.
- Mantsevich, A.P. 1958b. Serebrjannyj sosud Mastjuginskogo kurgana, *Acta-ArchHung* 9, 317-333.
- Mantsevich, A.P. 1987. Kurgan Solocha. Publikatsija odnoj kollekcii. Leningrad.
- Marazov, I. 1978. *Ritonite v drevna Trakija*. Sofia (in Bulgarian with summaries in Russian, English, French and German).
- Marchenko, I.D. 1960. Pogrebenie IV v. do n.e. iz Fanagorii, *SoobMuzMoskva* 1, 22-27.
- Maximova, M. 1928. Griechisch-persische Kleinkunst in Kleinasien nach den Perserkriegen, *AA*, 648-677.
- Melikian-Chirvani, A.S. 1993. The international Achaemenid style, *BAsInst* 7, 111-130.
- Melikian-Chirvani, A.S. 1996. The Iranian wine horn from pre-Achaemenid antiquity to the Safavid age, *BAsInst* 10, 85-139.
- Meriçboyu, Y.A. 2001. Antikçağ' de Anadolu Takilari. Istanbul.
- Meshcherjakov, D.V., V.K. Fedorov & L.T. Yablonskii 2006. Staraya kollekcija nachodok iz Prochorovki v svete novejščich archeologičeskich issledovanij, *RossA* 1, 107-116.
- Miller, M.C. 1993. Adoption and adaptation of Achaemenid metalware forms in Attic black-gloss ware of the fifth century, *AMI* 26, 109-146.
- Miller, M.C. 2007. The Poetics of Emulation in the Achaemenid World: The Figured Bowls of the "Lydian Treausure", *Ane West East* 6, 43-72.

- Minasjan, R.S. 1991. Technika izgotovlenija zolotych i serebjannych veščej iz Čertomlytskogo kurgana, in: A. Alekseev et al. Čertomlyk. Skifskij carskij kurgan IV v. do n.e. Kiev, 378-389.
- Minns, E.H. 1913. Scythians and Greeks. Cambridge.
- Molev, E.A. 2001. Diodor kak istočnik o podčinenii Bospora Achemenidam, in: *Antičnoe obščestvo IV: Vlast' i obščestvo v antichnosti. Materialy meždunarodnoj konferencii antikovedov, provodivščejasja 5-7 marta 2001 g. na istoričeskom fakul'tete SPbGU.* St Petersburg. http://www.centant.pu.ru/centrum/publik/confcent/2001-03/molev.htm
- Moorey, P.R.S. 1988. The technique of gold-figure decoration on Achaemenid silver vessels and its antecedents, *IrAnt* 23, 231-246.
- Mordvintseva, V.I. 1996. O vtoričnom ispol'zovanii achemenidskich blyud iz Prochorovskogo Kurgana, *RossA* 2, 155-160.
- Moshkova, M.G. 1981. Kompleks nachodok s ritonom iz Ural'skoj oblasti, *SovA* 4, 171-185.
- Muhly, J.D. 2004. Rec. ad, in: G. Lanfranchi, M. Roaf & R. Rollinger (eds.), Continuity of Empire (?). Assyria, Media, Persia. Proceedings of the International Meeting in Padua, 26th-28th April 2001 (History of the Ancient Near East. Monographs 5). Padova, 2003.
- Muscarella, O.W. 1980. Excavated and unexcavated Achaemenian art, in: D. Schmandt-Besserat (ed.), *Ancient Persia: The Art of an Empire* (Invited Lectures on the Middle East at the University of Texas at Austin 4). Malibu, 23-42.
- Musche, B. 1992. Vorderasiatischer Schmuck von den Anfangen bis zur Zeit der Achaemeniden (ca. 10.000-330 v. Chr.). Leiden, New York, Copenhagen, Köln.
- Nefedkin, A.K. 1998. Scena boja na zolotoj obkladke nožen akinaka iz Čertomlyka I voennaja reforma Darija III: k voprosu ob interpretatsii izobraženija, in: V.A. Chršanovskij (ed.), *Bosporskoe carstvo kak istoriko-kul'turnyj fenomen. Materialy konferentsii.* St Petersburg, 71-76.
- Neverov, O. 1976a. Antique Intaglios in the Hermitage Collection. Leningrad.
- Neverov, O.Ja. 1976b. Portrenye gemmy i perstni iz Severnogo Pričernomor'ja, *Trudy Gosudarstvennogo Ermitaža* 17, 166-182.
- Neverov, O.Ja. 1983. Gemmy antičnogo mira. Moscow.
- Neverov, O.Ja. 1984. Achemenidskij tcilindr iz Chersonesa, SoobErmit 49, 47.
- Neverov, O.Ja. 1986. Metalličeskie perstni epochi archaiki, klassiki i ellinizma iz Severnogo Pričernomor'ja, in: N.L. Grach (ed.), *Antičnaja torevtika*. Leningrad, 17-27.
- Neverov. O.J. 1995. Les bagues et les pierres gravées provenant de Nymphaion, *ArcheologiaWarsz* 46, 71-75.
- Nikulina, N.M. 1965. Pamjatniki antičnoj gliptiki iz Fanagorii, *SovA* 3, 185-196. Nikulina, N.M. 1994. *Iskusstvo Ionii i achemenidskogo Irana*. Moscow.
- Özgen, I. & J. Öztürk 1996. Heritage Recovered. The Lydian Treasure. Istanbul.

- Onajko, N.A. 1970. *Antičnyj import v Pridneprov'e i Pobuž'e v IV-II vv. do n.e.* (Svod archeologičeskich istočnikov D1-27). Moscow.
- Orfèvrerie ancienne 1975. I. Bondar (ed.), *Orfèvrerie ancienne de la collection du Musée des trésors historiques d'Ukraine*. Moscow.
- Petrenko, V.G. 1967. *Pravoberež'e Srednego Pridneprov'ja v V–III vv. do n.e.* (Svod archeologičeskich istočnikov D1-4). Moscow.
- Pfrommer, M. 1983. Italien Makedonien Kleinasien. Interdependenzen spätklassischer und frühhellenistischer Toreutik, *JdI* 98, 235-285.
- Pfrommer, M. 1985. Ein Bronzebecken in Malibu, GettyMusJ 13, 9-18.
- Pfrommer, M. 1987. Studien zu alexandrinischer und grossgriechicher Toreutik frühhellenistischer Zeit (Archäologische Forschungen 16). Berlin.
- Pfrommer, M. 1990a. Ein achämenidisches Amphorenrhyton mit ägyptischem Dekor, *AMI* 23, 191-209.
- Pfrommer, M. 1990b. *Untersuchungen zur Chronologie früh- und hochhellenistischen Goldschmucks* (Istanbuler Forschungen 37). Tübingen.
- Pfrommer, M. 2002. Eine Alexanderschlacht für skythische Fürsten, in: A.J. Clarke, J. Gaunt & B. Gilman (eds.), Essays in Honour of Dietrich von Bothmer. Amsterdam, 267-274.
- Pharmakowsky, B. 1908 Archäologische Funde im Jahre 1907. Südrußland. *AA*, 149-192.
- Pharmakowsky [Farmakovskii], B. 1913. Archäologische Funde im Jahre 1912. Russland, AA, 178-234.
- Platz-Horster, G. 2005. Die Silberfunde von Panderma in der Antikensammlung Berlin, in: T. Ganschow & M. Steinhart (eds.), *Otium. Festschrift für Volker Michael Strocka*. Remshalden, 295-303.
- Pruglo, V.I. 1974. K voprosu o date kurgana Bol'shaja Bliznica. *Sov A* 3, 64-77. Reade, J. 1986. A hoard of silver currency from Achaemenid Babylonia, *Iran* 24, 79-90.
- Rehm, E. 1992. Der Schmuck der Achämeniden. Münster.
- Rehm, E. 1993. Inkrustation bei achämenidischen Armreifen, *AMI* 26, 105-107. Reinach, S. 1892. *Antiquités du Bosphore Cimmérien*. Paris.
- Rostovtsev, M.I. 1918. *Kurgannye nachodki Orenburgskoj oblasti epochi rannego i pozdnego ellinizma* (Materialy po archeologii Rossii 37). Petrograd.
- Rostovtzeff [Rostovtsev], M.I. 1922. *Iranians and Greeks in South Russia*. Oxford. Rostowzew [Rostovtsev], M. 1931. *Skythien und der Bosporus*. Berlin.
- Rudenko, S.I. 1962. Die Sibirische Sammlung Peters I. Moscow-Leningrad
- Savelyeva, T.N. 1973. Ancient Egyptian vessel from Orsk with a quadrulingual inscription, in: 29 *International Congress of Orientalists (Paris, July 16-22, 1973). Papers Presented by Soviet Scientists.* Moscow, 1-10 (off-print).
- Savel'eva, T.V. [sic, T.N.] [Savelyeva] & K.F. Smirnov 1972. *Blizhnevostochnye drevnosti na Juzhnom Urale, VDI* 3, 106-123.
- Schefold, K. 1938. Der skythische Tierstil in Südrussland, *Eurasia Septentrio-nalis Antiqua* 12, 1-78.

- Schmitt, R. 2001. Eine weitere Alabaster-Vase mit Artaxerxes-Inschrift, *AMIT* 33, 191-201.
- Schneider, L. & P. Zazoff 1994. Kontruktion und Rekonstruktion. Zur Lesung thrakischer und skythischer Bilder, *JdI* 109, 143-216.
- Schwarzmaier, A. 1996. Die Gräber in der Groβen Bliznica und ihre Datierung, *JdI* 111, 105-137.
- Sevinç, N., C.B. Rose, D. Strahan & B. Tekkök-Biçken 1998. The Dedetepe tumulus, *StTroica* 8, 305-327.
- Shelov, D.B. 1956. Monetnoe delo Bospora VI-II vv. do n.e. Moscow.
- Shelov, D.B. 1978. *Coinage of the Bosporus VI-II Centuries BC* (BAR Supplementary Series 46). Oxford.
- Shkorpil, V.V. 1910. Otčet o raskopkach v g. Kerči i na Tamanskom poluostrove v 1907 g., *Izvestija archeologičeskoj komissii* 35, 12-47.
- Shkorpil, V.V. 1916. Otčet o raskopkach v Kerči, na Tamanskom poluostrove i v Alušte v 1912 g., *Izvestija archeologičeskoj komissii* 60, 7-35.
- Sideris, A. 2000. Les tombes de Derveni: quelques remarques sur la toreutique, *RA* 1, 3-36.
- Silant'eva, L.F. 1959. Nekropol' Nimfeja, MatIssIA 69, 5-107.
- Smirnov, Ja.I. 1909. Vostočnoe serebro. St Petersburg.
- Smirnov, J.I. 1934. Der Schatz von Achalgori. Tiflis.
- Smirnov, K.F. & A. Popov 1972. Orskie kurgany, AOtkryt 1971, 220-222.
- Sokol'skij, N.I. 1969. *Antičnye derevyannye sarkofagi Severnogo Pričernomor'ja* (Svod archeologičeskich istočnikov 01-17). Moscow.
- Strong, D.E. 1966. Greek and Roman Gold and Silver Plate. London.
- Summerer, L. 2003. Achämenidische Silberfunde aus der Umgebung von Sinope, *AncCivScytSib* 9/1-2, 17-42.
- Summerer, L. 2006. Bemerkungen zum silbernen Kalbskopfrhyton in der Ermitage, in: S. Konrad, R. Einicke, A.E. Furtwängler, H. Löhr & A. Slawisch (eds.), *Pontos Euxeinos. Beiträge zur Archäologie und Geschichte des antiken Schwarzmeer- und Balkanraumes*. Langenweißbach, 135-143.
- Talbot Rice, T. 1965. Ancient Art of Central Asia. New York.
- Tallgren, A.M. 1930. Caucasian monuments. The Kazbek Treasure, *ESA* 5, 109-182.
- Tchkonia [Chkonia], A. 1990. L'orfèvrerie de la Colchide antique sur le site de Vani, in: O. Lordkipanidze & P. Lévêquer (eds.), Le Pont-Euxin vu par les Grecs. Sources écrits et archéologique. Symposium de Vani (Colchide) Septembre-Octobre 1987. Paris, 261-265.
- Ter-Martirosov, F.I. 2000. Die Grenzen der achaimenidischen Gebiete in Trasnkaukasien, *AMIT* 32, 243-252.
- Themelis, P. & I. Touratsoglou 1997. Hoi Tafoi tov Derveniou. Athens.
- Tiratsjan, G.A. 1968. Zolotaja pektoral' iz Armavira (Armenia), SovA 4, 190-198.
- Toker, A. 1992. J. Öztürk (ed.), Metal Vessels. Museum of Anatolian Civilizations. Ankara.

- Tokhtas'ev, S.R. 2006. The Bosporus and Sindike in the era of Leukon I. New epigraphic publications, *AncCivScytSib* 12/1-2, 1-62.
- Treister, M.Ju. 1982. Bronzovye perstni s izobraženijami na ščitkach iz Gorgippii i okrestnostej, *VDI* 3, 67-76.
- Treister, M.Ju. 1985. Bospor i Egipet v III v. do n.e., VDI 1, 126-139.
- Treister, M.Yu. 2001. *Hammering Techniques in Greek and Roman Jewellery and Toreutics* (Colloquia Pontica 8). Leiden-Cologne-Boston.
- Treister, M.Yu. 2003. Metal vessels from Zelenskaya Gora barrow and related finds from Karagodeuashkh, *AncWestEast* 2/1, 51-77.
- Treister, M.Yu. 2005. Masters and workshops of the jewellery and toreutics from fourth-century Scythian burial-mounds, in: D. Braund (ed.), *Scythians and Greeks*. *Cultural Interactions in Scythia, Athens and the Early Roman Empire (Sixth Century BC First Century AD)*. Exeter, 56-63.
- Treister, M. 2007. On the ancient restorations and modifications of imported Greek and Achaemenid metalware by the Eurasian nomads, in: *CD-ROM. Second International Conference "Archaeometallurgy in Europe"*. Aquleia-Grado.
- Treister, M. 2008. Proizvedenija torevtiki achemenidskogo stilya i na "achamenidskuyu temu" v sarmatskich pogrebeniyach Prochorovskogo I Filippovskogo kurgannych mogil'nikov v Yuzhnom Priural'e, in: L.T. Jablonskij (ed.), Rannie kočevniki Volgo-Ural'skogo regiona. Materialy meždunarodnoj naučnoj konferencii "Rannie kočevniki Južnogo Priural'ya v svete noveišich archeologičeskich otkrytij", 21-25 aprely 2008. Orenburg, 145-170.
- Treister, M.Yu. 2009a Silver phialae from the Prochorovka barrow no. 1, *Anc-CivScytSib*. 15/1-2, 2009, 95-135.
- Treister, M. Yu. forthcoming b. A silver-gilt cup from the Prochorovka barrow no. B, *AncCivScytSib*. [volume and page numbers available yet?]
- Tsetskhladze, G.R. 1993/1994. Colchis and the Persian Empire: The problems of their relationship, *SilkRoadArtA* 3, 11-49.
- Tsigarida, B. & D. Ignatiadou 2000. *The Gold of Macedon. Archaeological Museum of Thessaloniki*. Athens.
- Uvarova, P.S. 1900. *Mogiln'niki Severnogo Kavkaza* (Materialy po archeologii Kavkaza 8). Moscow.
- Vakhtina, M.Ju. 2000. Kelermesskoe zerkalo, sektor 6: lisa, medved' i ptica, *Stratum plus* 3, 52-71.
- Vani 9 1996. O. Lordkipanidze, D. Kacharava & A. Chanturia (eds.), Vani 9 Archaeological Excavations (Analytical Bibliography: 1850-1995). Tbilisi.
- Van Rijn, M. *A Report on the "Western Cave Treasure" (Kalmakarreh Cave, Luristan.* www.michelvanrijn.nl/westerncave.htm.
- Vickers, M. 1979. Scythian Treasures in Oxford. Oxford.
- Vickers, M. 2000. Lapidary shock: meditations on an Achaemenid silver beaker "from Erzerum" in the Ashmolean Museum, Oxford. *AM IT* 32, 261-273. Vickers, M. 2002. *Scythian and Thracian Antiquities*. Oxford.

- Vickers, M. & D. Gill 1994. Artful crafts. Ancient Greek Silverware and Pottery. Oxford.
- Vlasova, E.V. 2000: Skifskij rog, in: S.L. Solovyov (ed.), *Antičnoe Pričernomor'e. Sbornik statej po klassisčeskoj archeologii.* St Petersburg, 46-67.
- Vlasova, E.V. 2001a. Sosudy v forme roga iz Semibratnich kurganov, in: N.A. Zacharova (ed.), *Juvelirnoe iskusstvo I material'naja kul'tura*. St Petersburg, 20-27.
- Vlasova, E.V. 2001b. Semibratnie kurgany, in: V.Yu. Zuev (ed.), Bosporskij fenomen. Kolonizacija regiona. Formirovanie polisov. Obrazovanie gosudarstva. Materialy meždunarodnoj konferencii. Pt. 2. St Petersburg, 127-132.
- Vogelsang, W.J. 1992. The Rise and Organisation of the Achaemenid Empire. The Eastern Iranian Evidence (Studies in the History of the Ancient Near East 3). Leiden-New York-Cologne.
- Waldbaum, J.C. 1983: *Metalwork from Sardis: The Finds Through 1974* (Archaeological Exploration of Sardis, Monograph 8). Cambridge, Mass.-London.
- Woolley, C.L. 1962. *The Neo-babylonian and Persian Periods* (Ur Excavations 9). London-Philadelphia.
- Yablonsky, L.T. 2007. Excavations of a "Royal" barrow-grave in the southern Ural, *FolA* 53, 85-100.
- Zimmermann, N. 1998. Beziehungen zwischen Ton- und Metallgefäßen spätklassischer und frühhellenistischer Zeit. Rahden.
- Zournatzi, A. 2000. Inscribed silver vessels of the Odryssian kings: gifts, tribute and the diffusion of the forms of "Achaemenid" metalware in Thrace, *AJA* 104, 683-706.
- Zuev, V.Yu. 2000. Problemy chronologii prochorovskoj kul'tury i kurgany u derevni Prochorovka, in: V.Yu. Zuev (ed.), ΣΥΣΣΙΤΙΑ. Pamyati Yuriya Viktoroviča Andreeva. St Petersburg, 304-330.
- Zuev, V.Yu. 2003. *Materialy k istorii izučeniya prochorovskich kurganov v Orenburž'e.* St Petersburg.